

Am I Ready?

Practice

Write each number in word form.

1. 7 _____

2. 4 _____

3. 21 _____

4. 35 _____

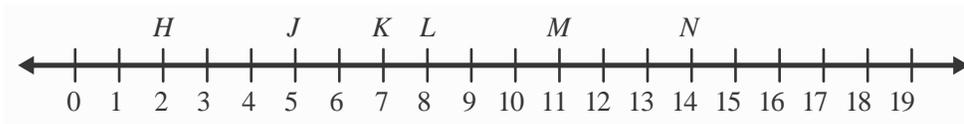
5. 112 _____

6. 228 _____

7. 504 _____

8. 460 _____

Write the number that represents each point on the number line.



9. *M* _____

10. *H* _____

11. *K* _____

12. *N* _____

13. *J* _____

14. *L* _____

Write each sentence using the symbols $<$, $>$, or $=$.

15. 3 is less than 7 _____

16. 42 is greater than 39 _____

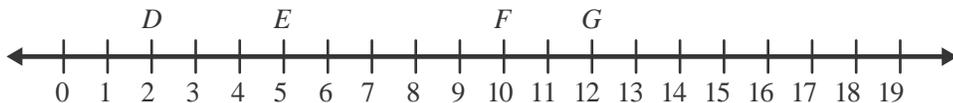
17. 5 is equal to 5 _____

18. 218 is greater than 202 _____

Am I Ready?

Review

Write the number that represents each point on the number line.



There are four points on the number line, *D*, *E*, *F*, and *G*.

Locate each point.

Then write the number that corresponds to each point.

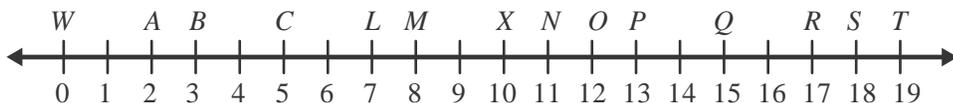
Point *D* is located at the number 2.

Point *E* is located at the number 5.

Point *F* is located at the number 10.

Point *G* is located at the number 12.

Write the number that represents each point on the number line.



- | | |
|--------------------|--------------------|
| 1. <i>S</i> _____ | 2. <i>C</i> _____ |
| 3. <i>N</i> _____ | 4. <i>A</i> _____ |
| 5. <i>T</i> _____ | 6. <i>P</i> _____ |
| 7. <i>M</i> _____ | 8. <i>B</i> _____ |
| 9. <i>R</i> _____ | 10. <i>L</i> _____ |
| 11. <i>O</i> _____ | 12. <i>Q</i> _____ |
| 13. <i>W</i> _____ | 14. <i>X</i> _____ |

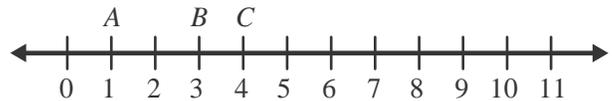
Am I Ready?

Apply

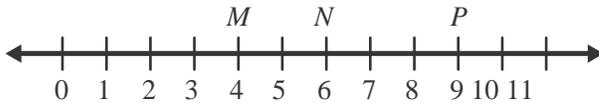
Solve.

1. Mr. Levenstein, Mrs. Padgett, and Mrs. Sheeley all teach fifth grade science. Mr. Levenstein has 26 students, Mrs. Padgett has 24 students, and Mrs. Sheeley has 29 students. Write *29 is greater than 26* using symbols.

2. The ages in years of the Bixler family children are represented on the number line below. The point *A* represents Abigail's age. The point *B* represents Bradley's age. The point *C* represents Charlotte's age. How old is Bradley?



3. The number of miles that three people ran on Monday is represented on the number line below. The point *M* represents the number of miles Martin ran. The point *N* represents the number of miles Nina ran. The point *P* represents the number of miles Paloma ran. How many miles did Nina run?



4. The table gives the number of pets that four friends have. Write *3 is less than 5* using symbols.

Friend	Number of Pets
Damon	3
Felisa	2
Kristin	0
Tyrone	5

5. A bakery made 144 banana nut muffins and 72 blueberry muffins. Write *144 is greater than 72* using symbols.

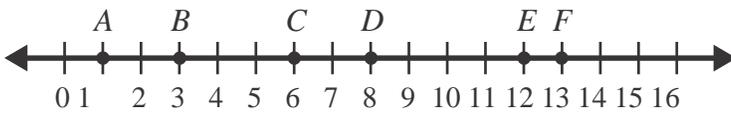
6. Regina sent 42 text messages during the month of March. She sent 51 text messages during the month of April. Write *42 is less than 51* using symbols.

Diagnostic Test

Write each number in word form.

- | | |
|--------|----------|
| 1. 6 | 1. _____ |
| 2. 18 | 2. _____ |
| 3. 34 | 3. _____ |
| 4. 41 | 4. _____ |
| 5. 150 | 5. _____ |
| 6. 271 | 6. _____ |

Write the value of each point on the number line.



- | | |
|-------|-----------|
| 7. A | 7. _____ |
| 8. F | 8. _____ |
| 9. B | 9. _____ |
| 10. D | 10. _____ |
| 11. C | 11. _____ |
| 12. E | 12. _____ |

Write each sentence using the symbols $<$, $>$, or $=$.

- | | |
|--|-----------|
| 13. 5 is less than 9 | 13. _____ |
| 14. 41 is greater than 12 | 14. _____ |
| 15. 92 is equal to 92 | 15. _____ |
| 16. 231 is greater than 230 | 16. _____ |
| 17. Sandy collected 16 seashells. Mark collected 14 seashells.
Write <i>14 is less than 16</i> using symbols. | 17. _____ |

Pretest

Name the value of the underlined digit.

- | | |
|------------------------|----------|
| 1. 1,567, <u>9</u> 44 | 1. _____ |
| 2. 13,4 <u>8</u> 9,012 | 2. _____ |
| 3. <u>6</u> 99,879 | 3. _____ |
| 4. <u>4</u> ,017,526 | 4. _____ |

Replace each ● with <, >, or = to make a true sentence.

- | | |
|--------------------|----------|
| 5. 9,013 ● 9,301 | 5. _____ |
| 6. 23,529 ● 23,528 | 6. _____ |
| 7. 0.08 ● 0.080 | 7. _____ |
| 8. 6.29 ● 6.33 | 8. _____ |

Write each fraction as a decimal.

- | | |
|-------------------------|-----------|
| 9. $\frac{683}{1,000}$ | 9. _____ |
| 10. $\frac{7}{10}$ | 10. _____ |
| 11. $\frac{6}{100}$ | 11. _____ |
| 12. $\frac{91}{100}$ | 12. _____ |
| 13. $\frac{21}{1,000}$ | 13. _____ |
| 14. $\frac{327}{1,000}$ | 14. _____ |
| 15. $\frac{49}{100}$ | 15. _____ |

Check My Progress (Lessons 1 through 4)

Name the place of the underlined digit. Then write the value of the digit.

- | | |
|--|----------------------------|
| 1. 5,014, <u>2</u> 45 | 1. _____ |
| 2. <u>2</u> ,137 | 2. _____ |
| 3. 823,4 <u>5</u> 1 | 3. _____ |
| 4. Write <i>fifty-six thousand, four hundred eleven</i> in standard form. | 4. _____ |
| 5. Write <i>nine million, two hundred thousand, one hundred five</i> in expanded form. | 5. _____
_____ |
| 6. Write 672,199 in expanded form. | 6. _____

_____ |

Compare. Use $>$, $<$, or $=$.

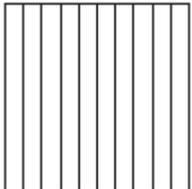
- | | |
|----------------------------------|----------|
| 7. 984,120 _____ 984,210 | 7. _____ |
| 8. 415,183,289 _____ 418,012,284 | 8. _____ |
| 9. 1,833,129 _____ 1,387,904 | 9. _____ |

Order the numbers from *least to greatest*.

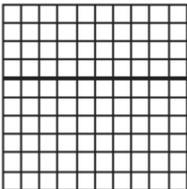
- | | |
|--|-----------|
| 10. 54,129; 53,105; 53,400; 54,131 | 10. _____ |
| 11. 10,285,531; 10,114,982; 10,300,185; 10,285,921 | 11. _____ |
| 12. 677,533; 676,800; 676,249; 676,531 | 12. _____ |

Shade the model. Then write the fraction in word form and as a decimal.

13. $\frac{4}{10}$



14. $\frac{55}{100}$



- | |
|-----------|
| 12. _____ |
| 13. _____ |
| 14. _____ |

Vocabulary Test

Use the word list to complete each of the statements. Then give an example of each word.

1. Decimals that have the same value are _____.

Example:

2. _____ is a system for writing numbers. In this system, the position of a digit determines its value.

Example:

3. The usual or common way to write a number is called _____.

Example:

4. A _____ is any one of the numbers 0, 1, 2, 3...

Example:

5. The way of writing a number as the sum of the *values* of its digits is called _____.

Example:

6. A _____ is a number that has a digit in the tenths place, hundredths place, and beyond.

Example:

Word List	
decimal	place value
equivalent decimals	standard form
expanded form	whole number

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of 4 in 4,132?
 A. 4,000 B. 400 C. 40 D. 4 1. _____

2. What is the value of 1 in 1,984,132?
 F. 1,000,000 G. 100,000 H. 100 I. 10 2. _____

3. What is the value of 9 in 98,750?
 A. 900,000 B. 90,000 C. 9,000 D. 900 3. _____

4. The speed of light is about *one hundred eighty-six thousand* miles per second. What is this number written in standard form?
 F. 18,600 H. 1,860,000
 G. 186,000 I. 18,600,000 4. _____

5. Which number makes a true number sentence in _____ $> 6,567$?
 A. 6,657 B. 5,657 C. 5,765 D. 6,557 5. _____

6. Which number makes a true number sentence in _____ < 0.011 ?
 F. 0.009 G. 0.011 H. 0.100 I. 0.110 6. _____

7. Which number makes a true number sentence in _____ $= 298.660$?
 A. 289.660 B. 289.66 C. 298.600 D. 298.66 7. _____

8. What is *four thousand, five hundred sixty-two* written in standard form?
 F. 456 G. 4,562 H. 40,562 I. 400,562 8. _____

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of 7 in 6,723?
 A. 7,000 B. 700 C. 70 D. 7 1. _____

2. What is the value of 3 in 1,984,132?
 F. 3,000,000 G. 300,000 H. 300 I. 30 2. _____

3. What is the value of 5 in 98,750?
 A. 5,000 B. 500 C. 50 D. 5 3. _____

4. The distance to Saturn is about 821,000,000 miles.
 What is this number written in words?
 F. *eight hundred twenty-one thousand*
 G. *eight hundred twenty-one million*
 H. *eight hundred twenty-one billion*
 I. *eight hundred twenty-one trillion* 4. _____

5. Which number makes a true number sentence in _____ > 7,269?
 A. 7,629 B. 7,229 C. 7,169 D. 6,962 5. _____

6. Which number makes a true number sentence in _____ < 0.022?
 F. 0.009 G. 0.022 H. 0.200 I. 0.220 6. _____

7. Which number makes a true number sentence in _____ = 384.660?
 A. 384.06 B. 384.066 C. 384.600 D. 384.660 7. _____

8. What is *two thousand, nine hundred eighty-one* written in standard form?
 F. 291 G. 2,981 H. 20,981 I. 200,981 8. _____

Chapter Test, Form 1B *(continued)*

9. What is *six million, seven hundred sixty-two thousand, one hundred twelve* written in standard form?

A. 2,012
 B. 676,112
 C. 6,726,112
 D. 6,762,112

9. _____

10. How is $\frac{3}{10}$ written as a decimal?

F. 0.003
 G. 0.300
 H. 0.030
 I. 3.000

10. _____

11. How is $\frac{16}{1,000}$ written as a decimal?

A. 16.000
 B. 1.600
 C. 0.160
 D. 0.016

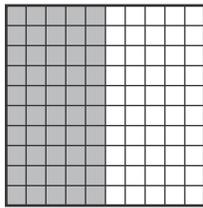
11. _____

12. Mrs. Martinez bought 0.7 pound of turkey. What is this decimal written in word form?

F. seven
 G. seven tenths
 H. seven hundredths
 I. seven thousandths

12. _____

13. What part of the model is shaded?



A. 0.005
 B. 0.05
 C. 0.5
 D. 5.0

13. _____

14. What is the expanded form of 392,105?

F. $3 \times 100,000 + 9 \times 10,000 + 2 \times 1,000 + 1 \times 100 + 5 \times 10$
 G. $3 \times 100,000 + 9 \times 10,000 + 2 \times 1,000 + 1 \times 100 + 5 \times 1$
 H. $3 \times 100,000 + 9 \times 1,000 + 2 \times 100 + 1 \times 10 + 5 \times 1$
 I. $3 \times 10,000 + 9 \times 10,000 + 2 \times 1,000 + 1 \times 100 + 5 \times 1$

14. _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which of the following shows the numbers ordered from *least to greatest*?
0.302, 0.32, 0.106, 0.160, 0.3
 A. 0.32, 0.3, 0.302, 0.160, 0.106
 B. 0.106, 0.160, 0.3, 0.302, 0.32
 C. 0.106, 0.160, 0.302, 0.32, 0.3
 D. 0.160, 0.106, 0.3, 0.302, 0.32 1. _____

2. Which of the following shows the numbers ordered from *least to greatest*?
9,345,287; 92,239,939; 87,623,176; 112,224,981
 F. 112,224,981; 87,623,176; 9,345,287; 92,239,939
 G. 87,623,176; 9,345,287; 92,239,939; 1,012,224,981
 H. 112,224,981; 92,239,939; 87,623,176; 9,345,287
 I. 9,345,287; 87,623,176; 92,239,939; 112,224,981 2. _____

3. What is *six thousand, two hundred thirty-four* written in standard form?
 A. 60,254 B. 6,254 C. 6,234 D. 623 3. _____

4. What is *three million, one hundred twenty-one thousand, four hundred fifty-one* written in standard form?
 F. 3,121,451 H. 31,214
 G. 312,151 I. 3,451 4. _____

5. What is the value of the underlined digit in 345,102?
 A. 5 B. 50 C. 500 D. 5,000 5. _____

6. What is the value of the underlined digit in 6,381,256?
 F. 80,000 G. 8,000 H. 800 I. 80 6. _____

7. How is the fraction $\frac{39}{100}$ written as a decimal?
 A. 0.039 B. 0.39 C. 0.0039 D. 3.9 7. _____

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

Use the table to answer Exercises 8 through 11.

Great Lakes		
Name	Size	Depth
Lake Erie	9,940 sq miles	62 ft
Lake Huron	23,010 sq miles	195 ft
Lake Michigan	22,400 sq miles	279 ft
Lake Ontario	7,540 sq miles	283 ft
Lake Superior	31,820 sq miles	483 ft

8. Which Great Lake is the greatest in size? 8. _____

9. Which Great Lake is the deepest? 9. _____

10. Which Great Lake is the smallest in size? 10. _____

11. Which Great Lake is most shallow? 11. _____

Use the four-step plan to solve each problem.

12. Lynn can walk two miles in 24 minutes. At this rate, how long will it take her to walk 6 miles? 12. _____

13. The Glendale Plaza Building in Glendale, California, is 353 feet tall. The U.S. Bank Tower in Los Angeles, California, is 1,017 feet tall. Which building is taller? 13. _____

14. After going on vacation, Mandy came home with \$5. She spent \$6 on a pair of sunglasses, \$10 on snacks, \$4 on a book, and \$5 on arcade games. How much money did Mandy start with? 14. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which of the following shows the numbers ordered from *least to greatest*?
0.602, 0.62, 0.206, 0.260, 0.6
 A. 0.62, 0.6, 0.602, 0.260, 0.206
 B. 0.206, 0.260, 0.602, 0.6, 0.62
 C. 0.206, 0.260, 0.6, 0.602, 0.62
 D. 0.6, 0.62, 0.602, 0.206, 0.260 1. _____

2. Which of the following shows the numbers ordered from *least to greatest*?
890,409; 890,904; 809,904; 809,940
 F. 809,904; 809,940; 890,409; 890,904
 G. 809,904; 890,409; 809,940; 890,904
 H. 809,940; 809,904; 890,409; 890,904
 I. 890,904; 890,409; 809,940; 809,904 2. _____

3. What is *nine thousand, seven hundred twenty-five* written in standard form?
 A. 925 B. 975 C. 9,725 D. 9,275 3. _____

4. What is *twenty million, two hundred thirty-four thousand, eight hundred seventy-six* written in standard form?
 F. 20,234,876 H. 20,243,876
 G. 20,432,867 I. 20,234,867 4. _____

5. What is the value of the underlined digit in 29,478?
 A. 20,000 B. 2,000 C. 200 D. 20 5. _____

6. What is the value of the underlined digit in 2,173,684?
 F. 60,000 G. 6,000 H. 600 I. 60 6. _____

7. How is the fraction $\frac{2}{10}$ written as a decimal?
 A. 0.02 B. 0.2 C. 0.002 D. 2.0 7. _____

Chapter Test, Form 2B *(continued)*

Read each question carefully. Write your answer on the line provided.

Use the table to answer Exercises 8 through 11.

Seas		
Name	Size	Depth
Red Sea	17,200 sq miles	1,608 ft
Aegean Sea	82,625 sq miles	11,624 ft
Dead Sea	462 sq miles	1,083 ft
Black Sea	168,495 sq miles	7,200 ft

8. Which sea is the greatest in size? 8. _____
9. Which sea is the deepest? 9. _____
10. Which sea is the smallest in size? 10. _____
11. Which sea is most shallow? 11. _____

Use the four-step plan to solve each problem.

12. Angel can walk three miles in 40 minutes. At this rate, how long will it take her to walk 6 miles?
 F. 40 minutes H. 60 minutes
 G. 80 minutes I. 120 minutes 12. _____
13. The three highest mountains in Colorado are Mount Massive (14,421 ft), Mount Harvard (14,420 ft), and Mount Elbert (14,433 ft). Which mountain has the greatest height? 13. _____
14. After shopping for school supplies, Martin came home with \$4. He bought a pack of pens for \$6, a calculator for \$12, and a notebook for \$3. How much money did he start with?
 A. \$40 B. \$35 C. \$30 D. \$25 14. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Write the value of the underlined digit.

1. 945,249 1. _____

2. 54,890,721 2. _____

3. 624,943,567 3. _____

4. 136,720,945 4. _____

5. Write the value of 8 in the number 829,376. 5. _____

6. Write the value of 5 in the number 2,095. 6. _____

Replace each _____ with <, >, or = to make a true sentence.

7. 15,014 _____ 15,004 7. _____

8. 4,639 _____ 4,638 8. _____

9. 0.70 _____ 0.700 9. _____

10. 24.106 _____ 24.316 10. _____

11. The distance to Saturn is about 821,000,000 miles.
Write this number in words. 11. _____

12. Write $\frac{16}{1,000}$ as a decimal. 12. _____

Chapter Test, Form 3A *(continued)*

Use the table to answer Exercises 13 through 17.

Size of the Planets (diameter)	
Name	Size
Earth	12,756 km
Mercury	4,880 km
Jupiter	142,740 km
Saturn	120,034 km
Venus	12,104 km

13. Which planet is greatest in size? 13. _____

14. Which planet is smallest in size? 14. _____

15. Order the planets from smallest to largest. 15. _____

16. Is the size of Earth and Venus combined greater than the size of Saturn? Explain. 16. _____

17. Is the size of Earth greater than or less than the size of Venus? 17. _____

18. Dallas' Renaissance Tower is 886 feet, Bank of America Plaza is 921 feet, and Bank One Center is 787 feet. List the buildings from shortest to tallest. 18. _____

19. The Delgados are buying a pool that is 10 feet \times 10 feet for \$1,188. They plan to pay in 12 equal payments. Find the amount of each payment. 19. _____

20. Julio increases the laps he runs by three laps each day. If he begins on Monday by running 4 laps, how many laps will he run on Wednesday at his current rate? 20. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Write the value of the underlined digit.

1. 631,903 1. _____

2. 72,165,882 2. _____

3. 4,652,573 3. _____

4. 125,308,723 4. _____

5. Write the value of 9 in the number 829,376. 5. _____

6. Write the value of 2 in the number 2,095. 6. _____

Replace each _____ with <, >, or = to make a true sentence.

7. 1,358 _____ 1,538 7. _____

8. 15,571 _____ 15,570 8. _____

9. 0.15 _____ 0.105 9. _____

10. 2.925 _____ 2.9250 10. _____

11. The sun is 93,000,000 miles away. What is this number in words? 11. _____

12. Write $\frac{55}{10}$ as a decimal. 12. _____

Chapter Test, Form 3B *(continued)*

Use the table to answer Exercises 13 through 17.

Size of the Planets (diameter)	
Name	Size
Earth	12,756 km
Mars	6,788 km
Neptune	49,620 km
Uranus	51,152 km

13. Which planet is greatest in size? 13. _____

14. Which planet is smallest in size? 14. _____

15. Order the planets from smallest to largest. 15. _____

16. About how much larger is Earth than Mars? 16. _____

17. Is the size of Earth greater than or less than the size of Neptune? 17. _____

18. There are three long tunnels that go under Boston Harbor. The Sumner Tunnel is 5,653 feet long. The Callahan Tunnel is 5,070 feet long. The Ted Williams Tunnel is 8,448 feet long. List the tunnels from shortest to longest. 18. _____

19. The Delgados are buying a pool that is 22 feet \times 15 feet for \$6,744. They plan to pay in 12 equal payments. Find the amount of each payment. 19. _____

20. Julio increases the laps he runs by three laps each day. If he begins on Monday by running 5 laps, how many laps will he run on Wednesday at his current rate? 20. _____

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. What is the expanded form of 340,729?

(A) $3 \times 10,000 + 4 \times 1,000 + 7 \times 100 + 2 \times 10 + 9 \times 1$
(B) $3 \times 100,000 + 4 \times 1,000 + 7 \times 100 + 2 \times 10 + 9 \times 1$
(C) $3 \times 100,000 + 4 \times 10,000 + 7 \times 100 + 2 \times 10 + 9 \times 1$
(D) $3 \times 10,000 + 4 \times 10,000 + 7 \times 100 + 2 \times 10 + 9 \times 1$

2. In which number does 4 have a value of 40,000?

(F) 345,629
(G) 532,471
(H) 429,376
(I) 4,720,890

3. The distance to the sun is about 93,000,000 miles. How is this number written in words?

(A) *ninety-three thousand*
(B) *ninety-three million*
(C) *ninety-three billion*
(D) *ninety-three trillion*

4. How is $\frac{7}{10}$ written as a decimal?

(F) 7.0
(G) 0.7
(H) 0.07
(I) 0.007

5. What is *seven hundred eighteen thousand, thirty-eight* in standard form.

(A) 708,038
(B) 708,830
(C) 718,830
(D) 718,038

6. What is the value of 3 in 735,229,981?

(F) 30,000,000
(G) 300,000
(H) 3,000,000
(I) 30,000

7. What is $2 \times 1,000 + 6 \times 100 + 5 \times 10 + 3 \times 1$ in standard form?

(A) 2,065
(B) 2,563
(C) 2,653
(D) 20,653

8. Which shows the numbers in order from least to greatest: 0.020, 0.022, 0.002, 0.202.

(F) 0.002, 0.020, 0.022, 0.202
(G) 0.202, 0.022, 0.020, 0.002
(H) 0.002, 0.022, 0.020, 0.202
(I) 0.202, 0.002, 0.020, 0.022

GO ON ►

Standardized Test Practice *(continued)*

Read each question. Then fill-in the correct answer.

9. Which number results in a true sentence in $345 < \underline{\hspace{2cm}}$?

- (A) 343
- (B) 344
- (C) 345
- (D) 346

12. There are eight rolls of paper towels in one package. There are four packages of paper towels in one box. There are ten boxes. How many rolls of paper towels are there?

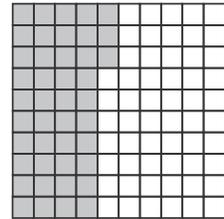
- (F) 32
- (G) 200
- (H) 300
- (I) 320

10. What is the word form of 1,504,200?

- (F) *one million, four hundred five thousand, two hundred*
- (G) *one million, five hundred four thousand, two hundred*
- (H) *ten million, five hundred forty thousand, two hundred*
- (I) *one hundred thousand, five hundred four thousand, two hundred*

13. Which fraction does the model represent?

- (A) $\frac{43}{10}$
- (B) $4\frac{3}{10}$
- (C) $\frac{43}{100}$
- (D) $4\frac{3}{100}$



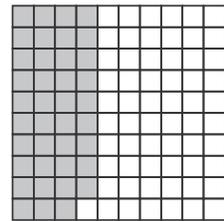
11. Landri ate 4 out of 10 grapes for a snack. Which decimal shows the number of grapes Landri ate?

- (A) 0.004
- (B) 0.04
- (C) 0.4
- (D) 4.0



14. Which decimal does the model represent?

- (F) 3.9
- (G) 3.09
- (H) 0.39
- (I) 0.039



Extended-Response Test

Demonstrate your knowledge by giving a clear, concise solution to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem.

If necessary, record your answer on another piece of paper.

1. Name the four steps of the problem-solving plan in order. Tell what you do at each step.

2. Tell how to order whole numbers and decimals.

3. Explain how to write 5.312 in expanded form.

Extended-Response Rubric

Level	Specific Criteria
4	The student demonstrates a <i>thorough understanding</i> of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	The student demonstrates an <i>understanding</i> of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor errors that reflect inattentive execution of the mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	The student has demonstrated only a <i>partial understanding</i> of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	The student has demonstrated a <i>very limited understanding</i> of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is incomplete and exhibits many flaws. Although the student has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many errors or may be incomplete.
0	The student has provided a <i>completely incorrect</i> solution or uninterpretable response, or no response at all.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

Write the number 879,456,231 where the student can see it.

1. What is the value of the 5 in this number?

2. What is the place value of the 8 in this number?

3. Which number is in the ten millions place?

4. Tell how you got your answer.

Oral Assessment *(continued)*

Write the number 12.637 where the student can see it.

5. What is the value of the 7 in this number?

6. What is the place value of the 3 in this number?

7. To order a set of numbers from greatest to least, what would you do?

Am I Ready?

Practice

Write all of the factors of each number.

- | | |
|-------------|-------------|
| 1. 12 _____ | 2. 13 _____ |
| 3. 10 _____ | 4. 25 _____ |
| 5. 36 _____ | 6. 22 _____ |

Write each repeated addition sentence as a multiplication sentence.

- | | |
|----------------------------------|---|
| 7. $5 + 5 + 5 = 15$
_____ | 8. $8 + 8 + 8 + 8 = 32$
_____ |
| 9. $11 + 11 = 22$
_____ | 10. $6 + 6 + 6 + 6 + 6 + 6 = 36$
_____ |
| 11. $12 + 12 + 12 = 36$
_____ | 12. $9 + 9 + 9 + 9 + 9 + 9 = 54$
_____ |

Multiply

- | | |
|--------------------------|---------------------------|
| 13. $8 \times 3 =$ _____ | 14. $1 \times 12 =$ _____ |
| 15. $7 \times 9 =$ _____ | 16. $6 \times 10 =$ _____ |
17. Coach Evans purchased nine soccer balls for gym class for \$10 each.
Find the total cost for all nine balls. _____



Am I Ready?

Review

Multiply.

1. $4 \times 5 =$ 1. _____
2. $6 \times 7 =$ 2. _____
3. $11 \times 3 =$ 3. _____
4. $7 \times 8 =$ 4. _____
5. $4 \times 6 =$ 5. _____
6. $5 \times 3 =$ 6. _____
7. $6 \times 9 =$ 7. _____
8. $9 \times 8 =$ 8. _____
9. $10 \times 7 =$ 9. _____
10. $9 \times 4 =$ 10. _____
11. $9 \times 5 =$ 11. _____
12. $5 \times 10 =$ 12. _____
13. Kaylee read 12 books each month over the summer.
How many books did she read in three months? 13. _____
14. Chase went to the movies with 4 friends. They each
spent \$9. How much did they spend in all? 14. _____
15. Bella made 6 bracelets for her friends. She used 7 beads
on each bracelet. How many beads did she use on all the
bracelets? 15. _____

Am I Ready?

Apply

Solve.

1. Felisa ran two miles on Monday, three miles on Tuesday, and one mile on Wednesday. If she runs the same number of miles for 5 weeks, how many total miles will she run?

2. Three friends went to see a movie. They each spent \$9 on the movie ticket and \$2 on a beverage. How much money altogether did they spend?

3. During the first year of a festival, there were 1,205 attendees. The second year, there were 180 more attendees than the first year. The third year, there were 500 more attendees than the second year. How many people attended the festival the third year?

4. Marcus scored 15 points during his first basketball game. He scored twice as many points during his second basketball game. If he scored a total of 60 points during his first three basketball games, how many points did he score during his third basketball game?

5. A bookstore has discounted books for \$7 each. Joseph buys 3 books for his sister and 4 books for himself. How much does Joseph spend?

6. Mr. Fraser drove 240 miles on Friday. On Saturday, he drove 180 miles. If he needs to drive a total of 600 miles by Sunday, how many miles does he need to drive on Sunday?

7. Tony made three dozen banana muffins. He gave 22 to his classmates and three to his sister. How many did he have left?
*Hint: 1 dozen

8. Greg downloaded 11 songs on his MP3 player. Each song was 3 minutes long. How many minutes of music did Greg download?

Diagnostic Test

Write all of the factors of each number.

1. 12

1. _____

2. 9

2. _____

3. 16

3. _____

4. 15

4. _____

Multiply.

5. $9 \times 4 =$

5. _____

6. $3 \times 10 =$

6. _____

7. $5 \times 5 =$

7. _____

8. $6 \times 8 =$

8. _____

9. $1 \times 4 =$

9. _____

10. $7 \times 9 =$

10. _____

11. Find the total length of 4 pencils placed end to end if each pencil is 7 inches long.

11. _____

Write each repeated addition sentence as a multiplication sentence.

12. $8 + 8 + 8 + 8 + 8 = 40$

12. _____

13. $\$6 + \$6 + \$6 + \$6 = \$24$

13. _____

14. $9 + 9 + 9 = 27$

14. _____

15. There are 7 students sitting at each table in the cafeteria. How many students are sitting at 8 tables?

15. _____

Pretest

Write the prime factorization of each number.

1. 63

1. _____

2. 32

2. _____

Write each product using an exponent.

3. $6 \times 6 =$

3. _____

4. $5 \times 5 \times 5 \times 5 =$

4. _____

Find each product mentally.

5. $8 \times 50 =$

5. _____

6. $330 \times 100 =$

6. _____

Rewrite each expression using the Distributive Property.
Then evaluate.

7. $3 \times (40 + 4)$

7. _____

8. $7 \times (20 + 8)$

8. _____

9. _____

Estimate by rounding. Show your work.

9. $33 \times 17 =$

10. _____

10. $107 \times 41 =$

11. _____

Estimate.

12. _____

11. $27 \times 3 =$

12. $42 \times 14 =$

13. _____

13. $108 \times 8 =$

14. $103 \times 52 =$

14. _____

Make a table to solve.

15. For every batch of cookies Carla made, her brother ate 2 cookies. If Carla's brother ate a total of 6 cookies, how many batches of cookies did Carla make?

15. _____

Check My Progress *(Lessons 1 through 5)*

Write each power as a product of the same factor. Then find the value.

1. 10^2
2. 14^3
3. 7^2

1. _____
2. _____
3. _____

Find the prime factorization of each number using exponents.

4. 50
5. 560

4. _____
5. _____

Find each product mentally.

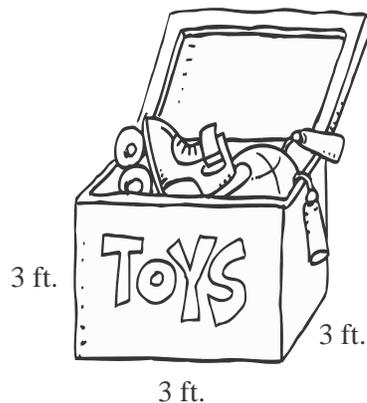
6. $60 \times 500 =$
7. $240 \times 10^2 =$
8. $96 \times 10^3 =$

6. _____
7. _____
8. _____

Solve.

9. Mr. Gabriel bought 10^2 packages of pens. Each package contains 15 pens. How many pens did he buy?
10. Andre is helping his father build a toy box for his little brother. The amount of space inside the toy box can be found by multiplying its width, length, and height. Write the amount of space, using an exponent. Then evaluate.

9. _____
10. _____



Vocabulary Test

Match each word to its definition. Write your answers on the lines provided.

- | | |
|---|---|
| 1. exponent _____ | A. A number raised to the third power. |
| 2. product _____ | B. The property that states that to multiply a sum by a number, you can multiply each addend by the same number and add the products. |
| 3. prime factorization _____ | C. A number that divides into a whole number evenly. Also, a number that is multiplied by another number. |
| 4. cubed _____ | D. A number obtained by raising a base number to an exponent. |
| 5. factor _____ | E. A way of expressing a composite number as a product of its prime factors. |
| 6. power _____ | F. In a power, the number of times the base is used as a factor. |
| 7. Distributive Property _____ | G. The answer to a multiplication problem. |
| 8. Explain how a number can be a power of 10. | |

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the prime factorization of 24? 1. _____
A. $2 \times 2 \times 2 \times 3$ B. $2 \times 2 \times 3$ C. 8×3 D. 6×4

2. What is the product of $10 \times 10 \times 10$, using an exponent? 2. _____
F. 10^2 G. 10^3 H. 1,000 I. 10,000

3. What is the value of 100×6 ? Use mental math. 3. _____
A. 6 B. 60 C. 600 D. 6,000

4. What is the value of $4 \times 2,000$? Use mental math. 4. _____
F. 800 G. 8,000 H. 80,000 I. 800,000

5. Which is the best estimate of 6×22 by using rounding or compatible numbers? 5. _____
A. 100 B. 120 C. 150 D. 180

6. Which is the best estimate of 23×52 by using rounding or compatible numbers? 6. _____
F. 100 G. 1,000 H. 10,000 I. 100,000

7. Which is the best estimate of 104×7 by using rounding or compatible numbers? 7. _____
A. 70 B. 500 C. 620 D. 700

8. What is the value of 54×3 ? 8. _____
F. 57 G. 98 H. 150 I. 162

9. What is the value of 132×4 ? 9. _____
A. 528 B. 400 C. 398 D. 136

Chapter Test, Form 1A *(continued)*

10. What is the value of 22×7 ? 10. _____
F. 136 G. 154 H. 168 I. 174
11. What is the value of 11×15 ? 11. _____
A. 165 B. 175 C. 185 D. 195
12. What is the value of 112×18 ? 12. _____
F. 1,162 G. 1,196 H. 2,016 I. 2,134
13. What is the value of 532×13 ? 13. _____
A. 2,128 B. 5,816 C. 6,619 D. 6,916
14. What is the value of 8×10^4 ? 14. _____
F. 80,000 G. 8,000 H. 800 I. 320
15. Barry has 103 model cars. Ryan has 2 times as many model cars.
How many model cars does Ryan have? 15. _____
A. 52 B. 105 C. 206 D. 300
16. Carly uses 450 minutes each month on her cell phone. How many
minutes will she use in 3 months? 16. _____
F. 900 G. 1,150 H. 1,225 I. 1,350
17. A hotel charges \$300 per room per week. How much did the hotel
make if they rented 70 rooms for one week? 17. _____
A. \$210,000 B. \$21,000 C. \$2,100 D. \$210
18. Janie arranged chairs for a presentation. Each row contained 14
chairs and she arranged 22 rows. How many chairs were arranged? 18. _____
F. 322 G. 308 H. 294 I. 140

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the prime factorization of 75? 1. _____
A. 3×25 C. 15×5
B. $3 \times 5 \times 5$ D. $3 \times 3 \times 5 \times 5$

2. What is the product of $7 \times 7 \times 7$, using an exponent? 2. _____
F. 7^2 G. 343 H. 7^3 I. 49

3. What is the value of 50×12 ? Use mental math. 3. _____
A. 6,000 B. 600 C. 60 D. 6

4. What is the value of 300×8 ? Use mental math. 4. _____
F. 240 G. 2,400 H. 240,000 I. 24,000

5. Which is the best estimate of 5×33 by using rounding or compatible numbers? 5. _____
A. 300 B. 200 C. 180 D. 150

6. Which is the best estimate of 11×68 by using rounding or compatible numbers? 6. _____
F. 70 G. 700 H. 7,000 I. 70,000

7. Which is the best estimate of 249×2 by using rounding or compatible numbers? 7. _____
A. 600 B. 500 C. 350 D. 300

8. What is the value of 19×6 ? 8. _____
F. 94 G. 102 H. 114 I. 122

9. What is the value of 109×7 ? 9. _____
A. 763 B. 743 C. 717 D. 687

Chapter Test, Form 1B *(continued)*

10. What is the value of 43×8 ? 10. _____
F. 386 G. 374 H. 356 I. 344
11. What is the value of 65×14 ? 11. _____
A. 830 B. 870 C. 910 D. 950
12. What is the value of 3×10^3 ? 12. _____
F. 300 G. 900 H. 999 I. 3,000
13. What is the value of 751×9 ? 13. _____
A. 5,057 B. 5,450 C. 6,759 D. 7,259
14. What is the value of 30×440 ? 14. _____
F. 12,250 G. 13,200 H. 15,100 I. 15,620
15. Marco has 79 baseball cards. Hector has 4 times as many baseball cards. How many baseball cards does Hector have? 15. _____
A. 316 B. 288 C. 226 D. 158
16. Yolanda exercises for 360 minutes each week. How many minutes will she exercise in 5 weeks? 16. _____
F. 1,550 G. 1,600 H. 1,650 I. 1,800
17. An electrician earns \$950 per week. How much will the electrician earn in 3 weeks? 17. _____
A. \$2,850 B. \$28,500 C. \$2,450 D. \$24,500
18. Shenequa arranged chairs for a meeting. Each row contained 12 chairs and she arranged 6 rows. How many chairs were arranged? 18. _____
F. 64 G. 72 H. 76 I. 82

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of 80×50 ? Use mental math. 1. _____
A. 4,000 B. 3,000 C. 400 D. 300

2. What is the value of $10 \times 4,000$? Use mental math. 2. _____
F. 400 G. 4,000 H. 40,000 I. 400,000

3. Which is the best estimate of 8×22 by using rounding or compatible numbers? 3. _____
A. 100 B. 200 C. 250 D. 300

4. Which is the best estimate of 22×97 by using rounding or compatible numbers? 4. _____
F. 1,800 G. 2,000 H. 2,300 I. 2,400

5. What is the value of 115×9 ? 5. _____
A. 905 B. 915 C. 1,035 D. 1,145

6. What is the value of 87×56 ? 6. _____
F. 4,216 G. 4,872 H. 5,042 I. 5,632

7. What is the value of 356×15 ? 7. _____
A. 5,340 B. 5,870 C. 6,020 D. 6,640

8. What is the value of 217×24 ? 8. _____
F. 4,464 G. 5,208 H. 6,052 I. 6,638

9. What is the prime factorization of 44? 9. _____
A. 2×22 C. 1×44
B. $2 \times 2 \times 11$ D. $2 \times 2 \times 2 \times 11$

Chapter Test, Form 2A *(continued)*

10. Find the product of $8 \times 8 \times 8 \times 8 \times 8$ using exponents. 10. _____
F. 8^2 H. 8^4
G. 8^3 I. 8^5
11. What is the value of 9^3 ? 11. _____
A. 900 C. 729
B. 810 D. 81
12. Farview Elementary bought seven new computer systems. Each cost \$1,298. What was the total cost? 12. _____
F. \$10,876 G. \$9,903 H. \$9,086 I. \$8,826
13. A school has 14 rooms with 28 desks in each room. How many desks are in the school? 13. _____
A. 392 B. 400 C. 412 D. 444
14. Kerry is collecting money for school. Her goal is to get \$200. She has collected \$15 each from 12 people so far. How much more money does she need to reach her goal? 14. _____
F. \$180 G. \$160 H. \$20 I. \$15

Multiply.

15. 200×6 15. _____
16. 259×5 16. _____
17. 231×4 17. _____
18. 433×18 18. _____
19. 4×10^2 19. _____
20. $14 \times 2,000$ 20. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of 60×120 ? Use mental math.
A. 72,000 B. 7,200 C. 720 D. 72 1. _____
2. What is the value of 20×500 ? Use mental math.
F. 100 G. 1,000 H. 10,000 I. 100,000 2. _____
3. Which is the best estimate of 32×49 by using rounding or compatible numbers?
A. 120 B. 150 C. 1,200 D. 1,500 3. _____
4. Which is the best estimate of 76×22 by using rounding or compatible numbers?
F. 16,000 G. 12,000 H. 1,600 I. 1,200 4. _____
5. What is the value of 164×11 ?
A. 1,924 B. 1,804 C. 1,762 D. 1,654 5. _____
6. What is the value of 104×32 ?
F. 2,206 G. 2,944 H. 3,328 I. 3,408 6. _____
7. What is the value of 83×75 ?
A. 6,225 B. 5,665 C. 5,105 D. 4,735 7. _____
8. What is the value of 166×14 ?
F. 2,806 G. 2,664 H. 2,408 I. 2,324 8. _____
9. What is the prime factorization of 32?
A. $2 \times 2 \times 2 \times 2 \times 2$ C. 1×32
B. 2×16 D. $2 \times 2 \times 2 \times 4$ 9. _____

Chapter Test, Form 2B *(continued)*

10. Find the product of $9 \times 9 \times 9 \times 9$ using exponents. 10. _____
F. 6,561 H. 9×10^4
G. 9^4 I. 9,999
11. What is the value of 7^3 ? 11. _____
A. 343 C. 49
B. 7×10^3 D. 21
12. A car dealership bought 9 new sets of running boards. 12. _____
Each cost \$146. What was the total cost?
F. \$1,204 G. \$1,314 H. \$1,602 I. \$2,244
13. A school has 18 rooms with 32 desks in each room. 13. _____
How many desks are in the school?
A. 408 B. 506 C. 544 D. 576
14. Antoine is saving money for vacation. His goal is to get \$250. He 14. _____
has made 11 deposits of \$18 each so far. How much more money
does he need to reach his goal?
F. \$52 G. \$68 H. \$182 I. \$198

Multiply.

15. 180×5 15. _____
16. 435×7 16. _____
17. 488×13 17. _____
18. 54×45 18. _____
19. 6×10^2 19. _____
20. $15 \times 2,000$ 20. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Find each product mentally.

1. $70 \times 300 =$

2. $21 \times 100 =$

3. $8 \times 500 =$

4. $6 \times 10^4 =$

1. _____

2. _____

3. _____

4. _____

Estimate by rounding or using compatible numbers.

5. $63 \times 51 =$

6. $7 \times 89 =$

7. $9 \times 31 =$

8. $18 \times 91 =$

5. _____

6. _____

7. _____

8. _____

Multiply.

9. $36 \times 77 =$

10. $124 \times 9 =$

11. $315 \times 40 =$

12. $31 \times 258 =$

9. _____

10. _____

11. _____

12. _____

13. The floor of a small foyer will be made from square ceramic tiles. Each tile has a side length of 8 inches. If the dimensions of the foyer floor are 24 inches by 48 inches, how many ceramic tiles are needed?

13. _____

14. Marc wants to hang four rectangular pictures in a row on a wall so that the horizontal space between each picture is always the same. Each picture has a length of 8 inches. The wall has a length of 74 inches. If he wants to have 12 inches of horizontal wall space before the first picture and after the fourth picture, how much space should he leave between pictures?

14. _____

Chapter Test, Form 3A *(continued)*

15. Write the prime factorization of 81. 15. _____

16. Write the product of $5 \times 5 \times 5 \times 5 \times 5$ using exponents. 16. _____

17. Each side of a cube-shaped box measures 6 feet. To find the volume, multiply the length times the width times the height. Express the amount of space inside as a power and then find the amount in cubic feet. 17. _____

18. Felisa bought 26 boxes of crayons. Each box had 12 crayons. How many crayons did Felisa buy? 18. _____

19. Dana jogs 955 minutes a month. How many minutes will she jog in 4 months? 19. _____

20. Mr. and Mrs. Hartford want to buy a car that costs \$12,675. Mr. Hartford saved \$235 each month for 8 months. Mrs. Hartford saved \$375 each month for 9 months. If they combine their money, how much will they have? Will they have enough money to buy the car? 20. _____

21. Derrick has 238 stamps in an album. How many stamps will he have in 4 albums? 21. _____

22. Antoinette has 208 coins. Jordan has 3 times as many coins. Use rounding to estimate the number of coins that Jordan has. 22. _____

23. Explain how to find 20×10^2 mentally. 23. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Find each product mentally.

1. $1,200 \times 7 =$

2. $400 \times 9 =$

3. $12 \times 800 =$

4. $7 \times 10^3 =$

1. _____

2. _____

3. _____

4. _____

Estimate by rounding or using compatible numbers.

5. $79 \times 21 =$

6. $8 \times 41 =$

7. $38 \times 59 =$

8. $32 \times 81 =$

5. _____

6. _____

7. _____

8. _____

Multiply.

9. $85 \times 46 =$

10. $7 \times 567 =$

11. $730 \times 12 =$

12. $84 \times 107 =$

9. _____

10. _____

11. _____

12. _____

13. The floor of a small foyer will be made from square ceramic tiles. Each tile has a side length of 7 inches. If the dimensions of the foyer floor are 28 inches by 42 inches, how many ceramic tiles are needed?

13. _____

14. Bethany wants to hang four rectangular pictures in a row on a wall so that the horizontal space between each picture is always the same. Each picture has a length of 9 inches. The wall has a length of 79 inches. If she wants to have 14 inches of horizontal wall space before the first picture and after the fourth picture, how much space should she leave between pictures?

14. _____

Chapter Test, Form 3B *(continued)*

15. Write the prime factorization of 70. 15. _____

16. Write the product of $5 \times 5 \times 5 \times 5 \times 5$ using exponents. 16. _____

17. Each side of a cube-shaped box measures 8 feet. To find the volume, multiply the length times the width times the height. Express the amount of space inside as a power and then find the amount in cubic feet. 17. _____

18. Ellen bought 18 boxes of paper clips. Each box had 150 paper clips. How many paper clips did Ellen buy? 18. _____

19. Regina reads 32 pages of a book each night. How many pages will she read in 5 days? 19. _____

20. Mr. and Mrs. Williams want to buy a boat that costs \$18,520. Mr. Williams saved \$850 each month for 7 months. Mrs. Williams saved \$970 each month for 7 months. If they combine their money, how much will they have? Will they have enough money to buy the boat? 20. _____

21. Dirk has 124 baseball cards in an album. How many baseball cards will he have in 6 albums? 21. _____

22. April has 196 stickers. Meredith has 3 times as many stickers. Use rounding to estimate the number of stickers that Meredith has. 22. _____

23. Explain how to find 25×10^2 mentally. 23. _____

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. There are 48 rows in the school auditorium. Each row can seat 12 people. If every row is full, how many people can be seated in the auditorium at the same time?

- (A) 600
- (B) 576
- (C) 550
- (D) 476

5. Bethany runs four miles every week. How many miles does she run in 16 weeks?

- (A) 64
- (B) 68
- (C) 72
- (D) 74



2. Find the product 200×7 mentally.

- (F) 1,040
- (G) 1,400
- (H) 14,000
- (I) 7×10^2

6. Which is the best estimate of 71×21 using rounding or compatible numbers?

- (F) 1,200
- (G) 1,400
- (H) 12,000
- (I) 14,000

3. A car dealer has 59 cars on its lot. Each car has four wheels. How many wheels are there altogether?

- (A) 184
- (B) 208
- (C) 216
- (I) 236



7. What is the value of 43×176 ?

- (A) 6,892
- (B) 7,114
- (C) 7,568
- (D) 7,722

4. What is the value of 561×14 ?

- (F) 5,588
- (G) 6,014
- (H) 6,612
- (I) 7,854

8. A cabinet holds 23 books on each shelf. There are 12 shelves. How many books are there in the cabinet?

- (F) 250
- (G) 275
- (H) 276
- (I) 300



Standardized Test Practice (continued)

Read each question. Then fill in the correct answer.

9. There are three children in the Williams family. If each child has 28 teeth, how many teeth do the Williams children have altogether?

- Ⓐ 56
- Ⓑ 84
- Ⓒ 112
- Ⓓ 120

13. What is the value of 33×15 ?

- Ⓐ 315
- Ⓑ 435
- Ⓒ 495
- Ⓓ 505

10. There are thirteen girls in the 5th grade. Each girl has two barrettes in her hair. How many barrettes are in the class?

- Ⓕ 26
- Ⓖ 28
- Ⓗ 30
- Ⓘ 32

14. What is the value of 5×10^5 ?

- Ⓕ 5,000
- Ⓖ 50,000
- Ⓗ 500,000
- Ⓘ 5,000,000

11. There are 22 students in a classroom. Each student has five pencils. How many pencils are there altogether?

- Ⓐ 128
- Ⓑ 120
- Ⓒ 110
- Ⓓ 88

15. Which is the best estimate of 88×92 using rounding or compatible numbers?

- Ⓐ 1,800
- Ⓑ 7,200
- Ⓒ 8,000
- Ⓓ 8,100

12. What is the prime factorization for 50 using exponents?

- Ⓕ 1×50
- Ⓖ $2 \times 5 \times 5$
- Ⓗ 2×10^5
- Ⓘ 2×5^2

16. A souvenir shop has 4,000 boxes of cards in stock. Each box contains six cards. How many cards are there in stock?

- Ⓕ 240
- Ⓖ 2,400
- Ⓗ 24,000
- Ⓘ 240,000



Extended-Response Rubric

Score	Explanation
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

For this activity, gather a box of 100 paper clips or a similar number of other small objects and model for the student the concept of arranging the objects into smaller groups and using the Distributive Property to aid with mental multiplication.

Read each question aloud to the student. The student should rearrange the objects into smaller groups. Then write the student's answer on the line below the question.

1. If you want to multiply 6×16 , how many groups of 6 objects should you make?

2. How can you separate 16 into two numbers that are easier to multiply by 6? What two groups of objects do you now have?

3. What is 6×10 ?

4. What is 6×6 ?

5. What is $60 + 36$?

6. Write the original problem using the Distributive Property.

Oral Assessment (continued)

Read each question aloud to the student. Then write the student's answer on the line below the question.

Janie is saving money for a new video game. Each week, she doubles the amount she saves from the previous week. If she saves \$1 the first week, how much money will she save in week 5? Use the table to show your work.

Week	1	2	3	4	5
Amount saved (\$)	\$1				

7. How much will she save in week 2?

8. Tell how you got your answer.

9. How much will she save in week 3?

10. Tell how you got your answer.

11. Finish the table, then add the totals together. How much money has she saved in five weeks?

12. If she needs \$40 for the video game, how many more weeks does she need to save?

Am I Ready?

Practice

Multiply.

1. $14 \times 2 =$ _____

2. $21 \times 4 =$ _____

3. $11 \times 5 =$ _____

4. $50 \times 6 =$ _____

5. $21 \times 5 =$ _____

6. $51 \times 8 =$ _____

7. $3 \times 25 =$ _____

8. $5 \times 15 =$ _____

9. $8 \times 82 =$ _____

10. $7 \times 19 =$ _____

Round each number to its greatest place value.

11. $212 =$ _____

12. $1,673 =$ _____

13. $380 =$ _____

14. $\$37,252 =$ _____

15. $\$1,289 =$ _____

16. $34,500 =$ _____

17. $23,945 =$ _____

18. $3,025 =$ _____

19. $59,721 =$ _____

20. $782 =$ _____

Divide.

21. $12 \div 4 =$ _____

22. $42 \div 6 =$ _____

23. $14 \div 7 =$ _____

24. $48 \div 6 =$ _____

25. $64 \div 8 =$ _____

26. $15 \div 3 =$ _____

27. $81 \div 9 =$ _____

28. $45 \div 5 =$ _____

29. $56 \div 7 =$ _____

30. $24 \div 8 =$ _____

Am I Ready?

Review

Multiplication

Step 1 Multiply the ones.

$$\begin{array}{r} 4 \\ 38 \\ \times 6 \\ \hline 8 \end{array}$$

$6 \times 8 \text{ ones} = 48 \text{ ones}$
 $48 \text{ ones} = 4 \text{ tens and } 8 \text{ ones}$

Step 2 Multiply the tens.

$$\begin{array}{r} 4 \\ 38 \\ \times 6 \\ \hline 228 \end{array}$$

$6 \times 3 \text{ tens} = 18 \text{ tens}$
 $18 \text{ tens} + 4 \text{ tens} = 22 \text{ tens}$

Multiply.

1. $\begin{array}{r} 12 \\ \times 4 \\ \hline \end{array}$

2. $\begin{array}{r} 21 \\ \times 3 \\ \hline \end{array}$

3. $\begin{array}{r} 43 \\ \times 2 \\ \hline \end{array}$

4. $\begin{array}{r} 51 \\ \times 6 \\ \hline \end{array}$

5. $\begin{array}{r} 83 \\ \times 3 \\ \hline \end{array}$

6. $\begin{array}{r} 71 \\ \times 4 \\ \hline \end{array}$

7. $\begin{array}{r} 45 \\ \times 8 \\ \hline \end{array}$

8. $\begin{array}{r} 62 \\ \times 6 \\ \hline \end{array}$

9. $\begin{array}{r} 39 \\ \times 9 \\ \hline \end{array}$

10. $\begin{array}{r} 27 \\ \times 5 \\ \hline \end{array}$

11. $\begin{array}{r} 29 \\ \times 3 \\ \hline \end{array}$

12. $\begin{array}{r} 63 \\ \times 7 \\ \hline \end{array}$

13. $\begin{array}{r} 44 \\ \times 3 \\ \hline \end{array}$

14. $\begin{array}{r} 48 \\ \times 5 \\ \hline \end{array}$

15. $\begin{array}{r} 97 \\ \times 3 \\ \hline \end{array}$

16. $\begin{array}{r} 40 \\ \times 2 \\ \hline \end{array}$

Am I Ready?

Apply

Solve.

1. Megan bought 4 packs of pencils for school. Each pack contained 8 pencils. How many pencils did Megan buy in all?

2. José helps his mom groom dogs. They can groom 2 small dogs each hour. How many small dogs can they groom in 8 hours?

3. The local football team's best running back rushed for 1,474 yards. Round the number of rushing yards to the nearest thousand.

4. Annika has \$369 in her savings account. Rounded to the nearest hundred, how much money has Annika saved?

5. Christian walks a total of 24 miles in 8 days. If he walks the same number of miles each day, how many miles does Christian walk each day?

6. A tailor uses 5 yards of fabric to make one dress. How many dresses can the tailor make with 45 yards of fabric?

7. Bradley plays tennis with three friends. If each player brings 3 tennis balls, how many tennis balls do they have altogether?

8. Isabel packs 2 boxes of raisins in each bag. How many boxes of raisins will Isabel need to pack 15 bags?

Diagnostic Test

Multiply.

1. $10 \times 2 =$

2. $36 \times 6 =$

1. _____

3. $16 \times 8 =$

4. $21 \times 7 =$

2. _____

3. _____

5. $40 \times 5 =$

6. $72 \times 9 =$

4. _____

5. _____

6. _____

7. Sandwiches at the local deli cost \$4. James is buying one sandwich for himself and 6 for his friends. How much will James pay for all of the sandwiches?

7. _____

Round each number to its greatest place value.

8. 56

9. 78

8. _____

9. _____

10. 7,810

11. 3,401

10. _____

11. _____

12. 59,630

13. 13,409

12. _____

13. _____

Divide.

14. $18 \div 6 =$

15. $28 \div 7 =$

14. _____

15. _____

16. $56 \div 8 =$

17. $63 \div 9 =$

16. _____

17. _____

18. $15 \div 3 =$

19. $12 \div 4 =$

18. _____

19. _____

20. $81 \div 9 =$

21. $35 \div 5 =$

20. _____

21. _____

Pretest

Divide mentally.

1. $200 \div 2 =$

2. $350 \div 5 =$

1. _____

3. $60 \div 3 =$

4. $120 \div 10 =$

2. _____

3. _____

Estimate. Show your work.

5. $813 \div 8 =$

6. $136 \div 4 =$

4. _____

5. _____

7. $274 \div 9 =$

8. $500 \div 3 =$

6. _____

7. _____

Divide.

9. $312 \div 2 =$

10. $93 \div 3 =$

8. _____

9. _____

11. $428 \div 4 =$

12. $96 \div 6 =$

10. _____

11. _____

13. $138 \div 7 =$

14. $315 \div 5 =$

12. _____

13. _____

15. $468 \div 8 =$

16. $913 \div 9 =$

14. _____

15. _____

Solve. Explain how you interpreted the remainder.

17. Mrs. Perkins made 157 lemon bars for the bake sale. She put them into bags of 2 bars each. How many bags of lemon bars can she make?

18. Mr. Jenson is buying pencils to sell at his art supply store. His budget is \$205. If packs of 100 pencils cost \$8, how many packs can he buy?

16. _____

17. _____

18. _____

Check My Progress *(Lessons 1 through 4)*

Write a fact family for each set of numbers.

1. 2, 5, 10

2. 5, 8, 40

3. 4, 9, 36

4. 6, 9, 54

1. _____

2. _____

3. _____

Divide.

5. $2 \overline{)26}$

6. $4 \overline{)45}$

7. $3 \overline{)39}$

8. $4 \overline{)89}$

4. _____

5. _____

6. _____

7. _____

8. _____

Divide mentally.

9. $600 \div 3 =$

10. $240 \div 8 =$

11. $80 \div 4 =$

12. $420 \div 6 =$

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

Solve.

13. John went to the park and saw 44 animal legs. If each animal had 4 legs, how many animals did he see?

14. Emma saw a total of 220 animals at the zoo. The animals are divided equally into 10 sections. How many animals are in each section?

Check My Progress (*Lessons 5 through 8*)**Estimate. Show how you estimated.**

1. $58 \div 7 =$

1. _____

2. $83 \div 9 =$

2. _____

3. $26 \div 5 =$

3. _____

4. $372 \div 6 =$

4. _____

5. $431 \div 7 =$

5. _____

6. $651 \div 8 =$

6. _____

Divide.

7. $881 \div 4 =$

7. _____

8. $652 \div 3 =$

8. _____

9. $728 \div 3 =$

9. _____

10. $804 \div 2 =$

10. _____

11. $618 \div 3 =$

11. _____

12. $424 \div 4 =$

12. _____

Divide. Check your answer using multiplication.

13. $5 \overline{)385}$

13. _____

14. $3 \overline{)162}$

14. _____

15. $8 \overline{)734}$

15. _____

16. $9 \overline{)582}$

16. _____

17. $4 \overline{)236}$

17. _____

18. $6 \overline{)521}$

18. _____

Vocabulary Test

Write a description for the boldfaced word(s) on the line below each sentence.

1. The teacher asked the students to write the **fact family** for the numbers 7, 8, and 56.

2. The **dividend** in $15 \div 3$ is 15.

3. The **divisor** in $15 \div 3$ is 3.

4. The students solved for the **unknown** in $36 \div 9 = \square$.

5. The **quotient** in $15 \div 3 = 5$ is 5.

6. The **remainder** in $33 \div 4 = 8 \text{ R}1$ is 1.

7. The teacher asked the students to solve for the **variable** in the equation $9 \times 5 = y$.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression?

1. $56 \div 8 =$

A. 8

C. 6

B. 7

D. 5

1. _____

2. $20 \div 4 =$

F. 3

H. 5

G. 4

I. 6

2. _____

3. $21 \div 7 =$

A. 9

C. 5

B. 7

D. 3

3. _____

4. $2 \overline{)42}$

F. 20

H. 22

G. 21

I. 23

4. _____

5. $6 \overline{)78}$

A. 13

C. 17

B. 15

D. 19

5. _____

6. $4 \overline{)84}$

F. 12

H. 20

G. 18

I. 21

6. _____

7. $720 \div 8 =$

A. 110

C. 90

B. 100

D. 80

7. _____

8. $300 \div 10 =$

F. 3

H. 300

G. 30

I. 3,000

8. _____

Chapter Test, Form 1A *(continued)*

9. Which is the best estimate of $215 \div 4$?

- A. 20 C. 60
 B. 50 D. 120

9. _____

10. Which is the best estimate of $156 \div 2$?

- F. 15 H. 40
 G. 25 I. 80

10. _____

What is the value of each expression?

11. $615 \div 5 =$

- A. 123 C. 100
 B. 103 D. 93

11. _____

12. $4 \overline{)850}$

- F. 200 R5 H. 212 R2
 G. 210 R4 I. 220 R3

12. _____

13. $7 \overline{)939}$

- A. 100 R3 C. 133 R4
 B. 130 R2 D. 134 R1

13. _____

14. Kathleen plans to divide blueberry muffins among 7 classmates. If she has 14 muffins, how many muffins will each friend receive?

- F. 4 muffins H. 2 muffins
 G. 3 muffins I. 1 muffin

14. _____

15. A group of 22 parents arrive at the parent-teacher meeting. There are rows of chairs set up in the classroom and each row seats 6 people. How many rows of chairs will the parents need?

- A. 4 rows C. 8 rows
 B. 6 rows D. 12 rows

15. _____

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression?

1. $64 \div 8 =$

A. 8

C. 6

B. 7

D. 5

1. _____

2. $24 \div 4 =$

F. 3

H. 5

G. 4

I. 6

2. _____

3. $35 \div 7 =$

A. 9

C. 5

B. 7

D. 3

3. _____

4. $2 \overline{)44}$

F. 20

H. 22

G. 21

I. 23

4. _____

5. $6 \overline{)90}$

A. 13

C. 17

B. 15

D. 19

5. _____

6. $4 \overline{)48}$

F. 12

H. 20

G. 18

I. 21

6. _____

7. $300 \div 5 =$

A. 150

C. 15

B. 60

D. 6

7. _____

8. $800 \div 20 =$

F. 4,000

H. 40

G. 400

I. 4

8. _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. A total of 66 parents attend the school debate. Each row of chairs seats 6 people. How many rows of chairs will the parents need?

A. 12 rows C. 10 rows
B. 11 rows D. 9 rows

1. _____

What is the value of each expression?

2. $54 \div 3 =$

F. 18 H. 9
G. 11 I. 7

2. _____

3. $42 \div 6 =$

A. 9 C. 7
B. 8 D. 6

3. _____

4. $240 \div 6 =$

F. 10 H. 30
G. 20 I. 40

4. _____

5. $800 \div 4 =$

A. 2 C. 20
B. 10 D. 200

5. _____

6. Which is the best estimate of $154 \div 5$?

F. 30 H. 40
G. 35 I. 45

6. _____

7. Which is the best estimate of $381 \div 9$?

A. 50 C. 30
B. 40 D. 20

7. _____

8. Jesse has a 470-page book. If he read 8 pages every day, about how many days will it take him to finish the book?

F. 40 days H. 60 days
G. 50 days I. 70 days

8. _____

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

What is the value of each expression?

9. $2\overline{)247}$ 9. _____
10. $3\overline{)398}$ 10. _____
11. $9\overline{)280}$ 11. _____
12. $5\overline{)425}$ 12. _____
13. $4\overline{)432}$ 13. _____
14. Ms. Richardson spent \$114 on apples for the carnival. If each bag of apples costs \$2, how many bags did she buy? 14. _____
15. A total of 48 students are going on a field trip to the zoo. If there needs to be an adult for every 4 students, how many adults are needed? 15. _____
16. Each picnic table at the park seats 8 people. How many tables will 24 people need? 16. _____
17. Mr. Conrad has \$138 to buy basketballs. About how many can he buy at \$7 each? 17. _____
18. Mark gave 21 tadpoles to his three friends. Mark gave twice as many tadpoles to David as he did Chris. George received twice as many tadpoles as David. How many tadpoles did each friend receive? 18. _____

Chapter Test, Form 2B *(continued)*

Read each question carefully. Write the answer on the line provided.

What is the value of each expression?

9. $4\overline{)638}$ 9. _____
10. $7\overline{)752}$ 10. _____
11. $3\overline{)286}$ 11. _____
12. $3\overline{)273}$ 12. _____
13. $4\overline{)804}$ 13. _____
14. Luis has a 408-page book. If he reads 4 pages every day, how many days will it take him to finish the book? 14. _____
15. On a class trip to the aquarium, there is 1 adult for every 7 students. If 44 students go on the class trip, how many adults are going on the class trip? 15. _____
16. Three families went to the fair together. An adult ticket cost \$7, and a child ticket cost \$5. If they spent a total of \$58, how many adults and how many children were there? 16. _____

17. Erin wants to equally divide oatmeal bars among 5 friends. If she has 12 bars, how many bars will each friend receive? 17. _____
18. Jerome has \$38 to buy tickets to the museum. How many tickets can he buy if each ticket costs \$8? 18. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Divide.

1. $71 \div 3 =$

1. _____

2. $47 \div 4 =$

2. _____

3. A group of 88 parents arrive at the school for the graduation ceremony. There are rows of chairs set up in the auditorium, and each row seats 8 people. How many rows of chairs will the parents need?

3. _____

4. Divide mentally. $810 \div 9 =$

4. _____

5. Divide mentally. $150 \div 3 =$

5. _____

6. Estimate.
 $323 \div 5 =$

6. _____

7. Estimate.
 $232 \div 4 =$

7. _____

8. Adam has a 197-page book. If he reads 9 pages every day, about how many days will it take him to finish the book?

8. _____

Divide.

9. $2 \overline{)682}$

9. _____

10. $3 \overline{)640}$

10. _____

11. $4 \overline{)491}$

11. _____

12. $7 \overline{)625}$

12. _____

13. $6 \overline{)343}$

13. _____

Chapter Test, Form 3A *(continued)*

14. $8\overline{)712}$ 14. _____

15. $5\overline{)530}$ 15. _____

16. A grocery sold 990 pears in September. If each bag contained 9 pears, how many bags of pears were sold? 16. _____

17. Kuri spent a total of \$68 on trading cards. His collection contains two types of cards. A pack of trading card A cost \$4, and a pack of trading card B cost \$7. How many packs of each type of trading card were purchased if the total number of packs is 11? 17. _____

18. On a class trip to the art museum, there is 1 adult for every 5 students. If 6 adults go on the class trip, about how many students are going on the class trip? 18. _____

19. Andre plans to share key chains with 4 classmates. If he has 10 key chains, how many key chains will each friend receive? 19. _____

20. A group of students travel by bus 467 miles in 4 days. If they travel the same amount of miles each day, about how many miles does the group travel each day? 20. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Divide.

1. $58 \div 5 =$

1. _____

2. $86 \div 4 =$

2. _____

3. A group of 72 parents arrive at the school on Friday night for the spring musical. There are rows of chairs set up in the auditorium, and each row seats 6 people. How many rows of chairs will the parents need?

3. _____

4. Divide mentally. $990 \div 3 =$

4. _____

5. Divide mentally. $210 \div 70 =$

5. _____

6. Estimate.
 $482 \div 6 =$

6. _____

7. Estimate.
 $176 \div 9 =$

7. _____

8. Vivian has a 550-page book on folk tales. If she reads 9 pages every day before falling asleep, about how many days will it take her to finish the book?

8. _____

Divide.

9. $2 \overline{)826}$

9. _____

10. $4 \overline{)849}$

10. _____

11. $5 \overline{)612}$

11. _____

12. $7 \overline{)419}$

12. _____

13. $4 \overline{)225}$

13. _____

Chapter Test, Form 3B *(continued)*

14. $9\overline{)783}$

14. _____

15. $6\overline{)618}$

15. _____

16. A grocery sold \$218 in oranges in June. If each bag cost \$2, how many bags of oranges did the grocery sell?

16. _____

17. Jonathan needs two different kinds of socks for school. A pair of gym socks costs \$3, and a pair of dress socks costs \$5. If he spent a total of \$50 on socks, how many of each type of sock did he purchase if the total number of pairs of socks is 12?

17. _____

18. On a class trip to the public library, there is 1 chaperone for every 4 students. If 5 chaperones go on the class trip, how many students go on the class trip?

18. _____

19. Deena plans to share yogurt cups with 3 classmates. If she has 5 vanilla yogurt cups and 2 strawberry yogurt cups, how many yogurt cups will each friend receive?

19. _____

20. A group of students travel 14 miles in 3 days. If they travel the same amount of miles each day, about how many miles does the group travel each day?

20. _____

Standardized Test Practice

Read each question. Fill in the correct answer.

1. A chef purchased 120 ears of corn at the farmer's market. The ears of corn are divided evenly into 5 bushels. How many ears of corn are in each bushel?



- (A) 24 ears of corn
- (B) 15 ears of corn
- (C) 8 ears of corn
- (D) 5 ears of corn

2. There are 68 players attending the baseball training camp. If the players are divided into groups of 4, how many groups are there?



- (F) 27 groups
- (G) 20 groups
- (H) 17 groups
- (I) 7 groups

3. In 3 hours, Darla read 63 pages. If she read the same number of pages each hour, how many pages did Darla read in one hour?

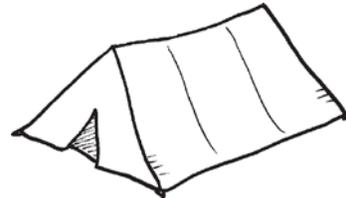
- (A) 20 pages
- (B) 21 pages
- (C) 31 pages
- (D) 33 pages

4. A grocery store has 240 juice drinks on its shelves. The juice drinks are in packs of 6 each. How many packs are there altogether?



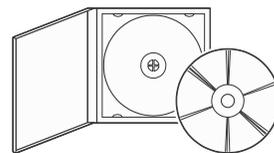
- (F) 14 packs
- (G) 20 packs
- (H) 24 packs
- (I) 40 packs

5. There are 375 students in attendance at the summer camp. The students are divided equally into groups of 5. How many groups are there?



- (A) 75 students
- (B) 80 students
- (C) 85 students
- (D) 90 students

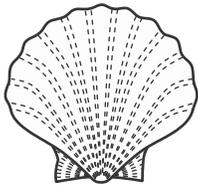
6. Brandon has a cabinet with 4 shelves. The cabinet can hold 1,600 CDs. If the shelves each hold the same number of CDs, how many CDs does each shelf hold?



- (F) 350 CDs
- (G) 375 CDs
- (H) 400 CDs
- (I) 425 CDs

Standardized Test Practice *(continued)*

7. Carrie has 56 seashells in her collection. She stores the seashells in display cases that hold 8 seashells per case. How many display cases are filled with seashells?



- Ⓐ 10 cases Ⓒ 7 cases
 Ⓑ 9 cases Ⓓ 6 cases

8. Sam spent \$24 on lunch for himself and his friends. The price of each item is shown in the table below. If he bought twice as many drinks as sandwiches, how many of each item did he buy?

Deli Prices	
Sandwich	\$4
Drink	\$2

- Ⓕ 2 sandwiches, 4 drinks
 Ⓖ 4 sandwiches, 8 drinks
 Ⓖ 4 sandwiches, 4 drinks
 Ⓘ 3 sandwiches, 6 drinks

9. Jackie counts 28 legs on 8 animals. If the animals are either zebras or peacocks, how many zebras are there?
- Ⓐ 4 zebras Ⓒ 6 zebras
 Ⓑ 5 zebras Ⓓ 7 zebras

10. There are 150 people seated in the theater for a play. There are 5 rows in the theater, each with the same number of seats. If the auditorium is completely filled, how many seats are in each row?



- Ⓕ 20 seats Ⓖ 60 seats
 Ⓖ 30 seats Ⓙ 100 seats

11. Rita biked 75 miles in 3 weeks. If she biked the same number of miles every week, how many miles did she bike each week?



- Ⓐ 30 miles Ⓒ 20 miles
 Ⓑ 25 miles Ⓓ 15 miles

12. A bakery owner needs 30 ounces of vanilla. How many 6-ounce bottles of vanilla must the owner buy?



- Ⓕ 10 bottles Ⓖ 5 bottles
 Ⓖ 8 bottles Ⓙ 4 bottles



Extended-Response Test

Demonstrate your knowledge by giving a clear, concise solution to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another piece of paper.

1. In your own words, describe what divisors, dividends, and quotients are.

- a. Give an example of a division problem with each of the above 3 components labeled.

- b. What is a remainder and how are they used in division problems? Explain.

2. Why is the remainder always less than the divisor?

3. How can you use multiplication to check division?

Extended-Response Rubric

Score	Explanation
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Collect 30 objects from around the classroom. Collect 10 pieces of paper, 10 pencils, 5 crayons, and 5 erasers. These items will be used to demonstrate dividing by one-digit numbers.

Read each question aloud to the student. Then write the student's answers on the lines below the questions.

Let's review some words that will help us understand division.

1. What is the difference between a dividend and a divisor?

2. What is a quotient?

3. If we want to write a division problem in which we divide by a one-digit number, which of the objects on the table can we use as our divisor?

4. Explain your answer.

5. Let's write a division problem based on what we've talked about above.

6. What number is our quotient?

Oral Assessment *(continued)*

Work through the word problem that follows with the student by reading each question aloud and writing the student's answer on the lines that follow.

Six pre-owned movies cost \$60. If all the movies cost the same, what is the cost of each?

7. Will we use multiplication or division to solve the problem above?

8. What number will be our divisor? What number will be our dividend?

9. Set up the problem so we can solve.

10. Let's write a word problem together where we use division to solve the problem.

Am I Ready?

Practice

Estimate. Tell whether the estimate is *greater than* or *less than* the actual product. Show your work.

1. $115 \times 24 =$ _____

2. $268 \times 25 =$ _____

3. $378 \times 67 =$ _____

4. $302 \times 73 =$ _____

Multiply.

5. $591 \times 5 =$

6. $1,162 \times 4 =$

7. $2,084 \times 8 =$

8. $8,893 \times 2 =$

9. $245 \times 18 =$

10. $491 \times 27 =$

11. $549 \times 39 =$

12. $843 \times 86 =$

Solve.

- 13.** Tamika and Devon hiked 7 miles each day for 5 days. How many miles did Tamika and Devon hike in all?

- 14.** Fernando's dogs eat 3 cups of food each day. How much food will his dogs eat in 30 days?

- 15.** Each page in Dana's sticker album holds 121 stickers. Dana has filled 11 pages of her album. How many stickers does she have in all?

- 16.** Linda sold 132 magazine subscriptions for her school fundraiser. Each magazine subscription costs \$9. How much money did Linda collect?

Am I Ready?

Review

Multiply 58×16 .

Step 1 Multiply 58 by 6.

$$\begin{array}{r} 4 \\ 58 \\ \times 16 \\ \hline 348 \end{array}$$

$6 \times 8 \text{ ones} = 48 \text{ ones}$

$6 \times 5 \text{ tens} = 30 \text{ tens}$

$48 \text{ ones} = 4 \text{ tens and } 8 \text{ ones}$

$30 \text{ tens} + 4 \text{ tens} = 34 \text{ tens}$

$34 \text{ tens} = 3 \text{ hundreds and } 4 \text{ tens}$

Step 2 Multiply 58 by 10.

$$\begin{array}{r} 58 \\ \times 16 \\ \hline 348 \\ + 580 \\ \hline \end{array}$$

$10 \times 8 \text{ ones} = 80 \text{ ones}$

$10 \times 5 \text{ tens} = 50 \text{ tens}$

$80 \text{ ones} = 8 \text{ tens and } 0 \text{ ones}$

$50 \text{ tens} + 8 \text{ tens} = 58 \text{ tens}$

$58 \text{ tens} = 5 \text{ hundreds and } 8 \text{ tens}$

Step 3 Add.

$$\begin{array}{r} 58 \\ \times 16 \\ \hline 348 \\ + 580 \\ \hline 928 \end{array}$$

Multiply.

1. $28 \times 3 =$ _____

2. $150 \times 6 =$ _____

3. $42 \times 12 =$ _____

4. $34 \times 25 =$ _____

5. $813 \times 43 =$ _____

6. $73 \times 14 =$ _____

7. $416 \times 3 =$ _____

8. $58 \times 23 =$ _____

9. $21 \times 19 =$ _____

10. $138 \times 5 =$ _____

11. $39 \times 12 =$ _____

12. $27 \times 29 =$ _____

Am I Ready?

Apply

Solve.

1. Elena purchased 12 packs of trading cards. Each pack contained 25 cards. How many trading cards did Elena purchase in all?

2. Ahmed has 15 albums filled with baseball cards. Each album holds 225 cards. How many baseball cards does Ahmed have in all?

3. Dan is the running back on his high school football team. Last year, he ran for 199 yards in each of 7 games. How many yards did Dan run last year?

4. Nicole saves \$793 each year. How much will she have saved after 15 years?

5. Rico rides his bike 15 miles each day. How many miles will he travel after 8 days?

6. Ms. Jones purchased 15 reams of paper for an art project. Each ream of paper contained 500 sheets. How many sheets of paper did Ms. Jones purchase in all?

7. Tony is making 24 trays of chocolate-covered donuts. There are 24 donuts on each tray. How many donuts is Tony making in all?

8. Sarah is volunteering at a fundraising event for a local charity. She is packing snack bags for the participants. She can pack 38 bags each hour. How many bags can she pack in 12 hours?

Diagnostic Test

Estimate. Tell whether the estimate is *greater than* or *less than* the actual product. Show your work.

1. $275 \times 36 =$ 1. _____

2. $118 \times 12 =$ 2. _____

3. $588 \times 27 =$ 3. _____

4. $202 \times 63 =$ 4. _____

Multiply.

5. $391 \times 7 =$ 6. $1,392 \times 4 =$ 7. $3,804 \times 5 =$ 5. _____

8. $645 \times 38 =$ 9. $191 \times 57 =$ 10. $449 \times 79 =$ 6. _____

7. _____

8. _____

9. _____

10. _____

Solve.

11. The Franco family is driving to a national park for vacation. 11. _____
They plan to drive 300 miles each day for 4 days. How many
miles will the Franco family drive in all?

12. Jin sold 37 boxes of wrapping paper for the school's 12. _____
fundraiser. Each box of wrapping paper costs \$12.
How much money did Jin collect?

13. Carson purchased 15 packs of baseball cards. There are 13. _____
25 cards in each pack. How many baseball cards did
Carson purchase in all?

Pretest

Estimate. Show your work.

1. $321 \div 13 =$

2. $614 \div 34 =$

1. _____

2. _____

3. $783 \div 43 =$

4. $645 \div 81 =$

3. _____

4. _____

Divide.

5. $450 \div 18 =$

6. $620 \div 31 =$

5. _____

6. _____

7. $594 \div 28 =$

8. $498 \div 78 =$

7. _____

8. _____

9. $944 \div 59 =$

10. $385 \div 29 =$

9. _____

10. _____

Divide. Check for reasonableness.

11. $7,440 \div 48 =$

12. $6,120 \div 11 =$

11. _____

12. _____

13. $5,994 \div 78 =$

14. $4,482 \div 83 =$

13. _____

14. _____

15. $19,552 \div 52 =$

16. $33,985 \div 71 =$

15. _____

16. _____

Solve.

17. A library has 528 books on 12 shelves. Each shelf holds the same number of books. How many books are on each shelf?

17. _____

18. A package of 500 craft sticks is being used for an art project. Each student in the class receives the same number of craft sticks. If there are 26 students in the class, how many craft sticks will each student receive? How many craft sticks will be left?

18. _____

Check My Progress *(Lessons 1 through 3)***Estimate. Show how you estimated.**

1. $84 \overline{)563}$ 1. _____

2. $27 \overline{)388}$ 2. _____

Divide. Check your answer for reasonableness.

3. $198 \div 11 =$ 3. _____

4. $210 \div 14 =$ 4. _____

5. $49 \overline{)961}$ 5. _____

6. $35 \overline{)770}$ 6. _____

7. $11 \overline{)912}$ 7. _____

8. $13 \overline{)656}$ 8. _____

Solve.

9. Lauren's basketball coach spent \$324 on 12 new basketballs for the team. How much did each basketball cost? 9. _____

Vocabulary Test

Fill in the circle next to the best answer.

- Which word is the number that is being divided?
A. divisor B. quotient C. dividend D. round 1. (A) (B) (C) (D)
- Which best describes the unknown in a problem?
F. divisor
G. remainder
H. quotient
I. missing value 2. (F) (G) (H) (I)
- Which word is the number that divides the dividend?
A. divisor B. quotient C. value D. remainder 3. (A) (B) (C) (D)
- Which of the following best describes a quotient?
F. the answer when you subtract
G. the answer when you multiply
H. the answer when you divide
I. a reasonable guess 4. (F) (G) (H) (I)
- Which shows a pair of compatible numbers?
A. $7,500 \div 60$
B. $4,150 \div 49$
C. $600 \div 8$
D. $1,200 \div 30$ 5. (A) (B) (C) (D)
- Which of the following is rounded correctly when estimating the problem?
F. In $8.9 \div 3$, 8.9 rounds to 5.
G. In $130 \div 8$, 8 rounds to 10.
H. In $72 \div 4$, 72 rounds to 80.
I. In $36 \div 7.2$, 7.2 rounds to 8. 6. (F) (G) (H) (I)

Chapter Test, Form 1A *(continued)*

8. $25\overline{)902}$

F. 11 R2

H. 36

G. 18 R2

I. 36 R2

8. _____

9. $91\overline{)8,591}$

A. 94

C. 94 R37

B. 94 R25

D. 95

9. _____

10. $88\overline{)5,662}$

F. 64 R30

H. 60 R34

G. 64 R56

I. 55 R2

10. _____

11. Mike has a 792-page book. If he reads 36 pages each day, how many days will it take him to finish reading the book?

A. 20 days

C. 22 days

B. 21 days

D. 22 R2 days

11. _____

12. One hundred sixty-seven students go on a field trip to the zoo. Each van can seat 11 students. Using the fewest number of vehicles possible, how many vans are needed?

F. 11 vans

H. 16 vans

G. 15 vans

I. 17 vans

12. _____

13. Michael is taking a 465-mile train ride. If the train travels 31 miles per hour, how many hours will the ride last?

A. 15 hours

C. 14 hours

B. 16 hours

D. 13 hours

13. _____

Chapter Test, Form 1B *(continued)*

8. $42\overline{)258}$

F. 6 R12

H. 6 R6

G. 6 R9

I. 6

8. _____

9. $51\overline{)4,274}$

A. 93 R21

C. 84

B. 91

D. 83 R41

9. _____

10. $78\overline{)7,106}$

F. 91 R16

H. 91

G. 91 R8

I. 90

10. _____

11. Melinda has a 598-page book. If she reads 26 pages each day, how many days will it take her to finish reading the book?

A. 20 days

C. 24 days

B. 23 days

D. 26 days

11. _____

12. One hundred eighty students go on a field trip to the zoo. Each van can seat 10 students. Using the fewest number of vehicles possible, how many vans are needed?

F. 16 vans

H. 18 vans

G. 17 vans

I. 19 vans

12. _____

13. Malia is taking a 407-mile train ride. If the train travels 37 miles per hour, how many hours will the ride last?

A. 12 hours

C. 13 hours

B. 11 hours

D. 14 hours

13. _____

Chapter Test, Form 2A *(continued)*

9. $94 \overline{)4,986}$
 A. 42 R2
 B. 50 R6
 C. 53 R4
 D. 55
 9. _____
10. $98 \overline{)8,854}$
 F. 80
 G. 80 R54
 H. 90
 I. 90 R34
 10. _____
11. $6,655 \div 85 = \square$
 A. 83
 B. 78 R25
 C. 78
 D. 75
 11. _____
12. Brandy drives a total of 2,030 miles to visit her grandmother. If she drives an average of 58 miles per hour, how many hours will it take her to make the trip?
 F. 35 hours
 G. 36 hours
 H. 39 hours
 I. 40 hours
 12. _____

Read each question carefully. Write your answer on the line provided.

13. The school district needs buses for 1,092 students for a class trip. If each bus holds 84 students, how many buses will be needed?
 13. _____
14. Forty-seven thousand people ride the city bus every day. On average, about how many people ride the bus each hour?
 14. _____
15. An entire chocolate cake has 7,200 calories. If the cake is equally divided into 12 pieces, how many calories are in each piece?
 15. _____
16. A florist just received a shipment of 1,308 roses. How many bouquets of a dozen roses can the florist make using the shipment of roses?
 16. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the best estimate of $243 \div 28$?

A. 5	C. 7	
B. 6	D. 8	1. _____

2. Which is the best estimate of $55,924 \div 71$?

F. 800	H. 400	
G. 700	I. 80	2. _____

3. Which is the best estimate of $31 \overline{)62,417}$?

A. 20,000	C. 200	
B. 2,000	D. 20	3. _____

4. Which is the best estimate of $42 \overline{)16,187}$?

F. 40	H. 4,000	
G. 400	I. 5,000	4. _____

5. Ciana made 42 bracelets using 12,368 millimeters of string. If she used an equal length of string for each bracelet, about how many millimeters of string did she use for each bracelet?

A. 3,000 mm	C. 30 mm	
B. 300 mm	D. 3 mm	5. _____

What is the value of each of the following?

6. $765 \div 45 = \square$

F. 13	H. 21	
G. 17	I. 71	6. _____

7. $506 \div 38 = \square$

A. 13 R12	C. 41 R6	
B. 31 R21	D. 51	7. _____

8. $6,561 \div 77 = \square$

F. 74 R1	H. 85 R11	
G. 85	I. 85 R16	8. _____

Chapter Test, Form 2B *(continued)*

9. $66\overline{)5,562}$

A. 101 R2

C. 84 R18

B. 85 R18

D. 84

9. _____

10. $74\overline{)4,145}$

F. 56 R1

H. 57

G. 56 R9

I. 561

10. _____

11. $8,713 \div 93 = \square$

A. 83

C. 93 R64

B. 93 R5

D. 94

11. _____

12. Brad drives a total of 1,056 miles to visit his grandmother. If he drives an average of 48 miles per hour, how many hours will it take him to make the trip?

F. 22 hours

H. 20 hours

G. 21 hours

I. 19 hours

12. _____

Read each question carefully. Write your answer on the line provided.

13. The school district needs buses for 1,012 students for a field trip. If each bus holds 92 students, how many buses will be needed?

13. _____

14. Thirty-six thousand people ride the city bus every day. On average, about how many people ride the bus each hour?

14. _____

15. An entire chocolate cake has 5,320 calories. If the cake is equally divided into 14 pieces, how many calories are in each piece?

15. _____

16. A florist just received a shipment of 1,152 roses. How many bouquets of a dozen roses can the florist make using the shipment of roses?

16. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

1. Estimate.
 $43,059 \div 62 =$

1. _____

2. Estimate.
 $11,117 \div 96 =$

2. _____

3. Estimate.
 $24,743 \div 54 =$

3. _____

4. Estimate. $21 \overline{)79,156}$

4. _____

5. Estimate. $16 \overline{)61,020}$

5. _____

6. Estimate. $23 \overline{)46,733}$

6. _____

7. Estimate. $298 \overline{)93,415}$

7. _____

Divide.

8. $844 \div 76 =$

8. _____

9. $901 \div 49 =$

9. _____

10. $2,653 \div 61 =$

10. _____

Chapter Test, Form 3A *(continued)*

11. $85\overline{)6,052}$ 11. _____
12. $77\overline{)1,243}$ 12. _____
13. $91\overline{)5,645}$ 13. _____
14. A teacher has 613 fliers to divide equally among 29 students. About how many fliers will each student receive? 14. _____
15. A building measures 1224 feet tall. If each floor in the building measures 12 feet tall, how many floors are there in the building? 15. _____
16. While on a field trip, the bus travels an average of 62 miles per hour. About how long will it take the bus to travel 132 miles? 16. _____
17. Antonio has 1,408 trading cards. A collector's box holds 44 cards. How many boxes will Antonio need to hold all of the cards? 17. _____
18. The school play earned \$11,364 in ticket sales. If the cost of each ticket is \$12, how many tickets were sold? 18. _____
19. The average life span of a swan is 7,300 days. How many years is this? 19. _____
20. Patricia is making pizzas. She has 174 pieces of pepperoni. She uses 36 pieces of pepperoni on the first pizza. If she uses the same amount on each pizza, does she have enough pepperoni to make 4 more pizzas? 20. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

1. Estimate.

$79,402 \div 37 = \square$

1. _____

2. Estimate.

$18,409 \div 61 = \square$

2. _____

3. Estimate.

$61,095 \div 59 = \square$

3. _____

4. Estimate.
- $18 \overline{)83,826}$

4. _____

5. Estimate.
- $63 \overline{)12,588}$

5. _____

6. Estimate.
- $42 \overline{)24,173}$

6. _____

7. Estimate.
- $240 \overline{)96,078}$

7. _____

Divide.

8. $957 \div 26 = \square$

8. _____

9. $893 \div 85 = \square$

9. _____

10. $4,115 \div 97 = \square$

10. _____

Chapter Test, Form 3B *(continued)*

11. $80\overline{)5,550}$ 11. _____
12. $79\overline{)1,575}$ 12. _____
13. $92\overline{)6,640}$ 13. _____
14. A teacher has 902 fliers to divide equally among 31 students. About how many fliers will each student receive? 14. _____
15. A building measures 1,344 feet tall. If each floor in the building measures 14 feet tall, how many floors are there in the building? 15. _____
16. While on a field trip, the bus travels an average of 48 miles per hour. About how long will it take the bus to travel 151 miles? 16. _____
17. Arnold has 1,066 trading cards. Each album holds 26 cards. How many albums does Arnold need to hold all of his cards? 17. _____
18. The school play earned \$11,271 in ticket sales. If the cost of each ticket is \$13, how many tickets were sold? 18. _____
19. The average life span of a beluga whale is 16,790 days. How many years is this? 19. _____
20. Pamela is making pizzas. She has 112 pieces of pepperoni. She uses 29 pieces of pepperoni on the first pizza. If she uses the same amount on each pizza, does she have enough pepperoni to make 4 more pizzas? 20. _____

Standardized Test Practice

Read each question. Fill in the correct answer.

1. There are 481 students hiking at Black Mountain Trail. There are 24 adults, and each adult is assigned the same number of students. About how many students are assigned to each adult?



- Ⓐ about 21 students
- Ⓑ about 20 students
- Ⓒ about 17 students
- Ⓓ about 12 students

2. There are 576 crickets divided equally in 12 plastic containers. How many crickets are in each container?



- Ⓕ 32 crickets
- Ⓖ 48 crickets
- Ⓗ 50 crickets
- Ⓘ 60 crickets

3. Cassie has 396 pictures to put in her album. If her album has 44 pages, how many pictures can she put on each page?



- Ⓐ 12 pictures
- Ⓑ 10 pictures
- Ⓒ 9 pictures
- Ⓓ 8 pictures

4. The gym teacher spent \$165 on exercise balls. If each exercise ball cost \$11 dollars, how many exercise balls did he buy?



- Ⓕ 15 exercise balls
- Ⓖ 16 exercise balls
- Ⓗ 20 exercise balls
- Ⓘ 65 exercise balls

5. The Grand Hotel has 15 floors and a total of 1,005 rooms. If each floor has the same number of rooms, how many rooms are on each floor?

- Ⓐ 70 rooms
- Ⓑ 67 rooms
- Ⓒ 65 rooms
- Ⓓ 57 rooms

6. Alyssa worked 216 hours last year. If she worked the same number of hours each month, how many hours did she work each month?

- Ⓕ 20 hours
- Ⓖ 19 hours
- Ⓗ 18 hours
- Ⓘ 17 hours

GO ON ►

Standardized Test Practice *(continued)*

7. William went to the store with his mother. He wants to buy a small action figure that costs 94¢. The number of coins in his pocket is shown in the table below. How many quarters does he have?

Number of Coins	
Quarter	?
Dime	3
Nickel	2
Penny	4

- Ⓐ 1 quarter
- Ⓑ 2 quarters
- Ⓒ 3 quarters
- Ⓓ 4 quarters

8. A jar of peanut butter has 27,306 calories. If there are 18 servings in each jar, how many calories are in one serving?

- Ⓕ 1,200 calories
- Ⓖ 1,463 calories
- Ⓗ 1,517 calories
- Ⓘ 1,681 calories



9. A theater earned \$87,890 in ticket sales. If each ticket cost \$55, how many tickets were sold?

- Ⓐ 2,000 tickets
- Ⓑ 1,598 tickets
- Ⓒ 1,423 tickets
- Ⓓ 181 tickets

10. Marcella bought a house for \$87,264. If she makes 96 equal payments, how much in dollars will she pay each month?

- Ⓕ \$809
- Ⓖ \$909
- Ⓗ \$1,000
- Ⓘ \$1,009

11. Tami drinks 2,916 glasses of water in one year. How many glasses of water does she drink in 7 months?



- Ⓐ 1,701 glasses
- Ⓑ 1,170 glasses
- Ⓒ 1,071 glasses
- Ⓓ 417 glasses



Extended-Response Test

Demonstrate your knowledge by giving clear, concise solutions to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another sheet of paper.

1. Colton has \$245 to spend on new wheels for his skateboard. Each wheel costs \$41.

- a. Explain how to estimate $\$245 \div \41 by using rounding, and then find the estimate.

- b. Explain how to estimate $\$245 \div \41 by using compatible numbers, and then find the estimate.

- c. Divide \$245 by \$41. Does Colton have enough money to buy 4 new wheels?

- d. Compare the estimates. Are they the same? Which estimate is closer to the exact answer?

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

Two hundred thirty-four people are going out to dinner. There are 18 tables.

1. Use mental math to estimate about how many people are at each table.

2. Tell how you got your answer.

3. Is your estimate smaller or larger than the exact answer?

4. Is it possible to have more than one estimate for this problem? Explain.

Use base ten blocks to find $234 \div 18$.

5. How many tens and how many ones are in each group?

6. Write a division problem based on what we have talked about above.

Oral Assessment *(continued)*

7. How can you check the reasonableness of your quotient?

8. How do you know that your quotient is reasonable?

McKenna solved $579 \div 21$ and got 26 R33 as her answer.

9. Is her answer correct?

10. Explain your answer.

11. Find $579 \div 21$.

12. Is your answer reasonable?

Name _____ Date _____

Am I Ready?

Practice

Name the place-value position of each underlined digit.

1. $\underline{6}3$ _____ 2. $0.\underline{2}$ _____ 3. $\underline{5},107$ _____

4. $8.\underline{2}4$ _____ 5. $1,\underline{3}89$ _____ 6. $\underline{9}5$ _____

Add.

7. $59 + 34 =$ _____ 8. $18 + 7 =$ _____ 9. $40 + 26 =$ _____

10. $143 + 17 =$ _____ 11. $9 + 5 + 8 =$ _____ 12. $18 + 6 + 7 =$ _____

13. Allie has 3 pairs of white socks, 5 pairs of blue socks, and 2 pairs of pink socks. Wade has 8 pairs of white socks, 1 pair of brown socks, and 4 pairs of black socks. How many more pairs of socks does Wade have than Allie?

Round each number to the underlined place.

14. $\underline{9}76$ _____ 15. $\underline{4}28$ _____ 16. $3,\underline{1}59$ _____

17. $\underline{6}25$ _____ 18. $1,\underline{8}37$ _____ 19. $2,\underline{8}16$ _____

Am I Ready?

Review

Addition

Step 1

$$\begin{array}{r} 1 \\ 185 \\ + 347 \\ \hline 2 \end{array}$$

Add the ones.

Add. 5 ones + 7 ones = 12 ones

12 ones = 1 ten and 2 ones

Write a 2 in the ones place of the sum.

Regroup the tens.

Step 2

$$\begin{array}{r} 11 \\ 185 \\ + 347 \\ \hline 32 \end{array}$$

Add the tens.

Add. 1 ten + 8 tens + 4 tens = 13 tens

13 tens = 1 hundred and 3 tens.

Write a 3 in the tens place of the sum.

Regroup the hundreds.

Step 3

$$\begin{array}{r} 11 \\ 185 \\ + 347 \\ \hline 532 \end{array}$$

Add the hundreds.

Add. 1 hundred + 1 hundred + 3 hundreds = 5 hundreds

Write a 5 in the hundreds place of the sum.

Add.

$$1. \quad \begin{array}{r} 28 \\ + 96 \\ \hline \end{array}$$

$$2. \quad \begin{array}{r} 64 \\ + 87 \\ \hline \end{array}$$

$$3. \quad \begin{array}{r} 83 \\ + 49 \\ \hline \end{array}$$

$$4. \quad \begin{array}{r} 48 \\ + 45 \\ \hline \end{array}$$

$$5. \quad \begin{array}{r} 28 \\ + 16 \\ \hline \end{array}$$

$$6. \quad \begin{array}{r} 95 \\ + 27 \\ \hline \end{array}$$

$$7. \quad \begin{array}{r} 405 \\ + 221 \\ \hline \end{array}$$

$$8. \quad \begin{array}{r} 529 \\ + 192 \\ \hline \end{array}$$

$$9. \quad \begin{array}{r} 321 \\ + 113 \\ \hline \end{array}$$

Am I Ready?

Apply

Solve.

1. Tyrell spent \$4 on a sandwich, \$2 on chips, and \$2 on a drink. Jackson spent \$3 on a vegetable, \$3 on a salad, and \$1 on a drink. How much more did Tyrell spend than Jackson?
2. The Orta family has 5 fish, 2 birds, and 1 dog. The Phillips family has 1 cat, 1 dog, and 3 fish. How many more pets does the Orta family have than the Phillips family?

3. Nick's batting average during last year's baseball season was .318. What is the place-value position of the 1 in .318?
4. Alonda jogs 5.92 miles each day. What is the place-value position of the 9 in 5.92?

5. Su Ling likes the rock-climbing wall at the gym. Her highest climb so far is 8.47 meters. What is the place-value position of the 8 in 8.47?
6. Janelle made sandwiches for a party. She made 11 chicken sandwiches, 8 cheese sandwiches, and 8 peanut butter sandwiches. How many sandwiches did she make in all?

7. Virgil practiced the piano 28 minutes on Wednesday and 25 minutes on Friday. How many minutes did he practice in all?
8. Karen opens a bag of mixed nuts to eat for a snack. She counts 4 pecans, 5 almonds, and 14 peanuts. How many nuts does Karen count in all?

Diagnostic Test

Name the place-value position of each underlined digit.

1. 83

1. _____

2. 296

2. _____

3. 14,63

3. _____

4. 27

4. _____

5. 8,594

5. _____

6. 5.943

6. _____

Add.

7. $15 + 36 =$

7. _____

8. $99 + 66 =$

8. _____

9. $358 + 34 =$

9. _____

10. $411 + 59 =$

10. _____

11. $362 + 201 =$

11. _____

12. $452 + 169 =$

12. _____

13. Nadia has 14 board games, 35 marbles, and 26 stuffed animals. Robert has 18 video games, 32 toy cars, and 28 model airplanes. How many more toys does Robert have than Nadia?

13. _____

Round each number to the underlined place.

14. 39

14. _____

15. 268

15. _____

16. 9,340

16. _____

17. 54,176

17. _____

Pretest

Round each decimal to the nearest one. Then add or subtract.

1. $6.3 + 5.5 =$

1. _____

2. $18.9 - 13.4 =$

2. _____

3. $4.4 + 2.8 =$

3. _____

4. $7.89 - 3.12 =$

4. _____

5. $160.7 + 40.9 =$

5. _____

Add or subtract.

6. $3.96 - 1.42 =$

6. _____

7. $10.67 + 15.11 =$

7. _____

8. $0.77 - 0.03 =$

8. _____

9. $0.3 + 1.45 =$

9. _____

10. $103.5 - 64.3 =$

10. _____

11. $341.68 + 104.34 =$

11. _____

Identify the addition property used to rewrite each problem.

12. $56 + 7 = 7 + 56$

12. _____

13. $(14 + 6) + 17 = 14 + (6 + 17)$

13. _____

Solve.

14. Sheila wants to purchase a video game that costs \$43.49.

She has \$19.37 and receives \$22.50 for baby sitting. Does she have enough money to purchase the game? Explain.

14. _____

15. Jamie ran 1.4 miles on Monday and 2.3 miles on Wednesday. How many total miles did he run on Monday and Wednesday?

15. _____

Check My Progress *(Lessons 1 through 3)*

Round each decimal to the place indicated.

1. 32.62; tenths 1. _____

2. 43.0129; hundredths 2. _____

3. 52.87; ones 3. _____

Round each decimal to the nearest one. Then add or subtract.

4. $3.7 + 2.4 =$ 4. _____

5. $93.5 - 52.6 =$ 5. _____

6. $16.7 + 8.84 =$ 6. _____

Determine whether you need an estimate or an exact answer. Then solve.

7. Aubrey wants to buy a pair of jeans for \$29.99 and a shirt for \$15.75. How much money does Aubrey need to buy both items? 7. _____

8. A family rents a cottage for \$79.95 a day for 7 days. About how much does the family pay for the cottage? 8. _____

Check My Progress *(Lessons 4 through 7)*

Add. Use base-ten blocks. Draw the result in the table.

1. $0.67 + 0.38 =$

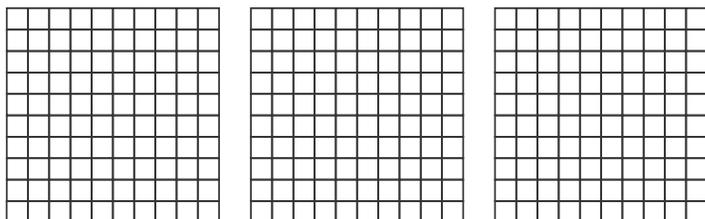
1. _____

Ones	Tenths	Hundredths

Add. Use decimal models.

2. $1.04 + 1.35 =$

2. _____



Add.

3. $5.93 + 10.42 =$

3. _____

4. $0.7 + 0.33 =$

4. _____

5. $11.04 + 0.25 =$

5. _____

**Use properties of addition to find each sum mentally.
Show your steps and identify the properties that you used.**

6. $13 + 29 + 7 =$

6. _____

Vocabulary Test

Use the words in the word bank to complete the crossword puzzle.

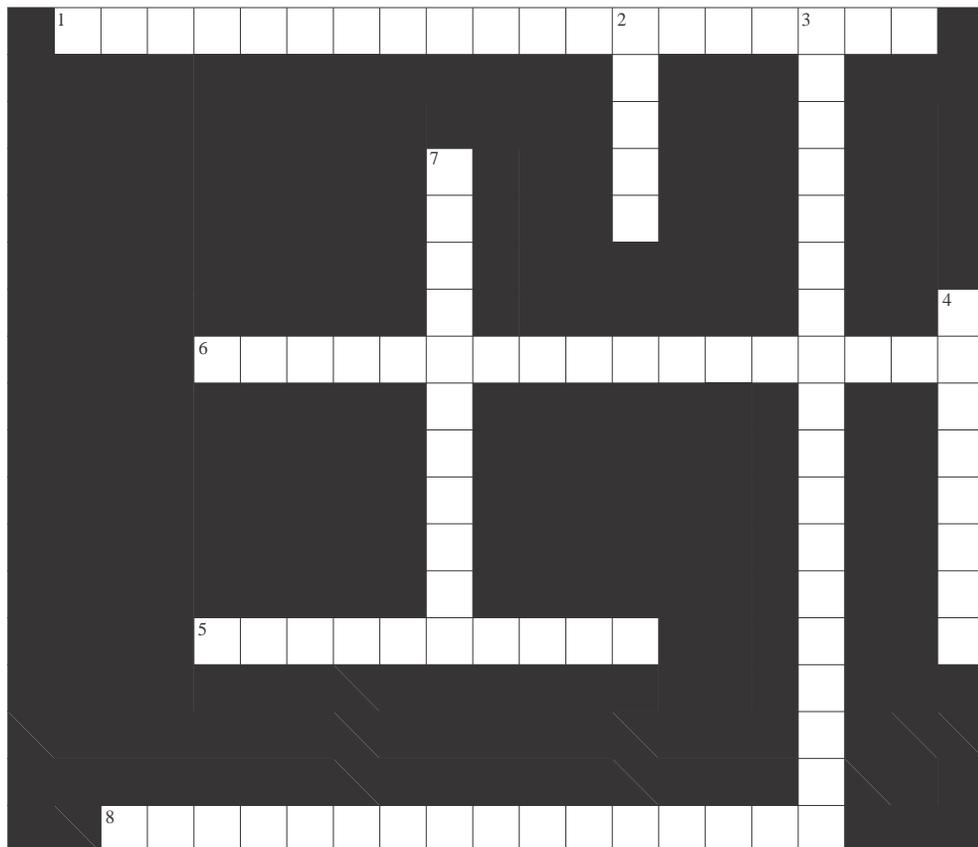
approximate value	compatible numbers
Commutative Property	difference
estimate	exact answer
reasonable estimate	round

Across

- States that you can add numbers in any order
- Subtracting results in finding the _____ between two numbers
- Easily added or subtracted mentally
- When you round a number, you find its _____.

Down

- _____ 7.45 to the nearest whole number
- If you do not need an exact answer, you can check for a(n) _____.
- about* how much
- When using actual numbers, you find a(n) _____.



Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the best estimate?

$$4.97 + 13.02 =$$

A. 14

C. 18

B. 16

D. 19

1. _____

2. Which is the best estimate?

$$9.6 - 6.2 =$$

F. 16

H. 4

G. 15

I. 3

2. _____

3. Which is the best estimate?

$$5.07 - 2.56 =$$

A. 2

C. 7

B. 3

D. 8

3. _____

4. Jan's lunch bill is \$5.74. She pays with a \$10 bill.

About how much change does she receive?

F. \$4

H. \$15

G. \$5

I. \$16

4. _____

What is the value of each of the following?

5. 5.45

$$+ 0.03$$

A. 8.45

C. 5.49

B. 5.75

D. 5.48

5. _____

6. 8.00

$$+ 2.72$$

F. 8.27

H. 10.76

G. 10.72

I. 10.96

6. _____

Chapter Test, Form 1A *(continued)*

7. Which property is shown below?

$$864.17 + 0 = 864.17$$

- A. Associative Property
B. Commutative Property

- C. Identity Property
D. Distributive Property

7. _____

8. Which property is shown below?

$$(12 + 16) + 34 = 12 + (16 + 34)$$

- F. Associative Property
G. Commutative Property

- H. Identity Property
I. Distributive Property

8. _____

What is the value of each of the following?

9.
$$\begin{array}{r} 8.8 \\ - 6.2 \\ \hline \end{array}$$

- A. 2.6
B. 2.7

- C. 3.1
D. 15

9. _____

10.
$$\begin{array}{r} 10.57 \\ - 4.25 \\ \hline \end{array}$$

- F. 6.32
G. 6.33

- H. 8.72
I. 14.82

10. _____

11.
$$\begin{array}{r} 1.38 \\ - 0.66 \\ \hline \end{array}$$

- A. 0.62
B. 0.72

- C. 1.92
D. 2.05

11. _____

12. The science club raised \$98.75 to buy bird feeders and birdseed to place outside the classroom. Club members bought one bag of bird seed for \$2.75. Each bird feeder costs \$12. How many bird feeders can the club buy?

- F. 6
G. 7

- H. 8
I. 9

12. _____

Chapter Test, Form 1B *(continued)*

7. Which property is shown below?

$$(21 + 23) + 25 = 21 + (23 + 25)$$

A. Associative Property

B. Commutative Property

C. Identity Property

D. Distributive Property

7. _____

8. Which property is shown below?

$$14 + 17 + 46 = 14 + 46 + 17$$

F. Associative Property

G. Commutative Property

H. Identity Property

I. Distributive Property

8. _____

What is the value of each of the following?

9. $\begin{array}{r} 9.9 \\ - 5.3 \\ \hline \end{array}$

A. 3.3

B. 3.5

C. 3.6

D. 4.6

9. _____

10. $\begin{array}{r} 11.68 \\ - 3.47 \\ \hline \end{array}$

F. 8.01

G. 8.21

H. 9.21

I. 15.15

10. _____

11. $\begin{array}{r} 2.47 \\ - 0.77 \\ \hline \end{array}$

A. 1.70

B. 1.30

C. 2.30

D. 3.25

11. _____

12. The history club has \$171 with which to buy historical fiction books. Club members have already spent \$15 on bookmarks. If each book costs \$12, how many books can the club buy?

F. 12

G. 13

H. 14

I. 15

12. _____

Chapter Test, Form 2A *(continued)*

8. Which property is shown below?

$$(52 + 68) + 38 = 52 + (68 + 38)$$

F. Associative Property

H. Identity Property

G. Commutative Property

I. Distributive Property

8. _____

9. Which property is shown below?

$$935.82 + 0 = 935.82$$

A. Associative Property

C. Identity Property

B. Commutative Property

D. Distributive Property

9. _____

Read each question carefully. Write your answer on the line provided.

What is the value of each of the following?

10.
$$\begin{array}{r} 53.39 \\ - 2.54 \\ \hline \end{array}$$

10. _____

11.
$$\begin{array}{r} 82.4 \\ - 13.5 \\ \hline \end{array}$$

11. _____

12. $7 - 4.68 = \square$

12. _____

13. The coach recorded how fast his runners ran 1 mile. Eric ran a mile in 10.84 minutes, Kay ran a mile in 12.79 minutes, and Rosie ran a mile in 9.58 minutes. How many more minutes did Eric run than Rosie?

13. _____

14. Bailey spent \$12.25 at the arcade on Saturday and \$9.50 at the arcade on Sunday. How much money did Bailey spend altogether?

14. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the best estimate?

$$11.36 + 52.6 =$$

A. 42

C. 64

1. _____

B. 63

D. 65

2. Which is the best estimate?

$$69.58 - 34.26 =$$

F. 36

H. 103

2. _____

G. 37

I. 104

3. Adrienne's lunch cost \$13.16. She hands the cashier \$20.

About how much change does Adrienne receive?

A. \$6

C. \$8

3. _____

B. \$7

D. \$9

4. Last week, the Tasha Cola company had sales of \$2,346.87. This week, the company had sales of \$8,867.14. Which is the best estimate of the company's total sales for both weeks?

F. \$6,000

H. \$10,000

4. _____

G. \$9,000

I. \$11,000

What is the value of each of the following?

5. 63.8

$$\begin{array}{r} + 8.12 \\ \hline \end{array}$$

A. 55.67

C. 71.92

5. _____

B. 61.72

D. 72.71

6. $73.28 + 32.48 =$

F. 40.8

H. 104.76

6. _____

G. 101.20

I. 105.76

7. $69.77 + 5.02 =$

A. 74.79

C. 75.75

7. _____

B. 74.98

D. 75.79

Chapter Test, Form 2B *(continued)*

8. Which property is shown below?

$$(64 + 79) + 48 = 64 + (79 + 48)$$

- F. Associative Property
-
- G. Commutative Property

- H. Identity Property
-
- I. Distributive Property

8. _____

9. Which property is shown below?

$$745.96 + 0 = 745.96$$

- A. Associative Property
-
- B. Commutative Property

- C. Identity Property
-
- D. Distributive Property

9. _____

Read each question carefully. Write your answer on the line provided.

What is the value of each of the following?

10.
$$\begin{array}{r} 42.28 \\ - 3.64 \\ \hline \end{array}$$

10. _____

11.
$$\begin{array}{r} 73.2 \\ - 19.5 \\ \hline \end{array}$$

11. _____

12. $9 - 5.79 = \square$

12. _____

13. The coach recorded how fast his runners ran 1 mile. Emmett ran a mile in 9.73 minutes, Kate ran a mile in 10.87 minutes, and Robin ran a mile in 8.46 minutes. How many more minutes did Emmett run than Robin?

13. _____

14. Jenna spent \$7.75 at the arcade on Friday and \$11.50 at the arcade on Saturday. How much money did Jenna spend altogether?

14. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

1. Estimate.

$2.3 + 3.8 =$

1. _____

2. Estimate.

$69.58 - 32.24 =$

2. _____

3. Felix's dinner costs \$16.49. Felix pays with a \$20 bill. About how much change does he receive? Show your work.

3. _____

Add.

4. $5.3 + 0.96 =$

4. _____

5. $48.6 + 7.22 =$

5. _____

6. $71.29 + 43.68 =$

6. _____

7. $64.87 + 5.01 =$

7. _____

8. Identify the addition property shown below.

$16 + 29 + 44 = 16 + 44 + 29$

8. _____

9. Identify the addition property shown below.

$(83 + 52) + 46 = 83 + (52 + 46)$

9. _____

10. Identify the addition property shown below.

$865.72 + 0 = 865.72$

10. _____

Chapter Test, Form 3A *(continued)***Subtract.**

11. $64.28 - 3.67 =$ 11. _____

12. $73.3 - 19.6 =$ 12. _____

13. $9 - 5.41 =$ 13. _____

14. On Monday, Tarmac Jean Company earned \$202.19. On Tuesday, the company earned \$186.62. About how much did Tarmac Jean Company earn in all? Show your work. 14. _____

15. Company A has a budget of \$13.76 million and Company B has a budget of \$24.31 million. What is the difference between the two if each budget is rounded to the nearest tenth of a million? 15. _____

16. Lamar has \$28. He spent \$13.28 on school supplies. How much money does Lamar have left? 16. _____

17. The coach recorded how fast his runners ran 1 mile. Luisa ran a mile in 8.34 minutes, Angie ran a mile in 8.73 minutes, and Rafael ran a mile in 9.27 minutes. How much faster did Luisa run than Rafael? 17. _____

18. Last year, Calvin's batting average was 0.37. Derek's batting average was 0.29. What was the difference in their averages? 18. _____

19. Kim purchased 2.33 yards of satin fabric and 3.12 yards of flannel fabric. How many total yards of fabric did she purchase? 19. _____

20. Katrina bought a pair of jeans for \$39.29 and a sweater for \$46.54. She received \$14.17 in change. How much money did Katrina have originally? 20. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

1. Estimate.

$$4.9 + 2.1 =$$

1. _____

2. Estimate.

$$78.69 - 23.35 =$$

2. _____

3. Ama's dinner costs \$17.38. Ama pays with a \$20 bill. About how much change does he receive? Show your work.

3. _____

Add.

4. $8.5 + 0.84 =$

4. _____

5. $57.7 + 9.32 =$

5. _____

6. $92.39 + 64.78 =$

6. _____

7. $73.96 + 6.02 =$

7. _____

8. Identify the addition property used to rewrite the problem below.

$$36 + 48 + 52 = 48 + 52 + 36$$

8. _____

9. Identify the addition property used to rewrite the problem below.

$$(74 + 63) + 35 = 74 + (63 + 35)$$

9. _____

10. Identify the addition property used to rewrite the problem below.

$$974.63 + 0 = 974.63$$

10. _____

Chapter Test, Form 3B *(continued)***Subtract.**

11. $73.46 - 4.75 =$ 11. _____

12. $94.2 - 18.7 =$ 12. _____

13. $8 - 6.32 =$ 13. _____

14. On Monday, Bonus Book Company earned \$303.28. On Tuesday, the company earned \$295.73. About how much did Bonus Book Company earn in all? Show your work.

14. _____

15. Company A has a budget of \$23.87 million and Company B has a budget of \$14.22 million. What is the difference between the two budgets if each is rounded to the nearest tenth of a million?

15. _____

16. Abby has \$38. She spent \$29.37 on a new sweatshirt. How much does Abby have left?

16. _____

17. The coach recorded how fast his runners ran 1 mile. Luann ran a mile in 9.26 minutes, Anne ran a mile in 11.64 minutes, and Rubin ran a mile in 10.36 minutes. How much faster did Luann run than Rubin?

17. _____

18. Last year, Dustin's batting average was 0.32. Scott's batting average was 0.27. What was the difference in their averages?

18. _____

19. Marco purchased 1.25 yards of flannel fabric and 3.15 yards of fleece fabric. How many total yards of fabric did Marco purchase?

19. _____

20. Carter bought a pair of jeans for \$49.99 and a shirt for \$23.59. He received \$6.42 in change. How much money did Carter have originally?

20. _____

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. Herman finished all 7 math questions in 35 minutes. If each question took the same amount of time, how long did it take Herman to complete each question?

Ⓐ 5 min
Ⓑ 6 min
Ⓒ 7 min
Ⓓ 8 min

4. Zina is reading a 968-page book. She wants to finish the book in 8 days. How many pages does Zina need to read each day?

Ⓕ 100 days
Ⓖ 121 days
Ⓗ 125 days
Ⓘ 131 days

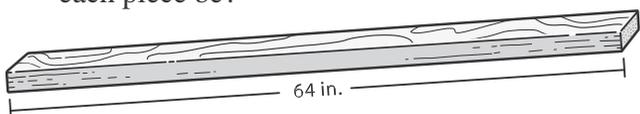
2. Kathy and her friends are playing a game. Kathy divided all 20 playing cards equally among 4 players. How many cards did each player receive?

Ⓕ 3 cards
Ⓖ 4 cards
Ⓗ 5 cards
Ⓘ 6 cards

5. Jasper completed the first race in 2.3 minutes and the second race in 2.4 minutes. About how many minutes did it take for him to finish the two races?

Ⓐ 5 min
Ⓑ 6 min
Ⓒ 7 min
Ⓓ 8 min

3. Isaac is helping his mom build a tree house. Isaac is dividing the board shown below into 8 equal pieces. How long will each piece be?



Ⓐ 8 in.
Ⓑ 6 in.
Ⓒ 4 in.
Ⓓ 2 in.

6. Samantha has \$2.21 in her pants pocket. She finds \$2.53 in her coat pocket. About how much money does she have altogether?

Ⓕ \$3.00
Ⓖ \$4.00
Ⓗ \$5.00
Ⓘ \$6.00

Standardized Test Practice *(continued)*

7. Omar has saved a total of \$3,168 in the past year. If he saved the same amount each month, how much money did Omar save each month?

Ⓐ \$264
 Ⓑ \$265
 Ⓒ \$270
 Ⓓ \$275

8. Tora bought a notebook for \$1.19, a pack of pencils for \$0.89, and a new backpack for \$13.99. To the nearest dollar, about how much did Tora spend in all?

Ⓕ \$15
 Ⓖ \$16
 Ⓗ \$17
 Ⓘ \$18

9. Tom paid \$3.49 for a sandwich, \$1.25 for pretzels, and \$2.25 for a drink. How much did Tom pay in all?

Ⓐ \$7.99
 Ⓑ \$7.00
 Ⓒ \$6.99
 Ⓓ \$6.00

10. Below are the prices for gasoline at three different stations.

Unleaded Gasoline Prices	
Station A	\$2.79
Station B	\$2.49
Station C	\$2.44

How much more is the gasoline at Station A than at Station C?

Ⓕ \$3.00
 Ⓖ \$0.35
 Ⓗ \$0.30
 Ⓘ \$0.03

11. The library is 5.4 miles from Roxanne's house. The school is 9.3 miles from Roxanne's house. How much farther is the school than the library from Roxanne's house?

Ⓐ 4.0 miles
 Ⓑ 3.9 miles
 Ⓒ 3.1 miles
 Ⓓ 2.9 miles

12. Kira purchases a book that costs \$26.95. She pays for the book with \$30. How much change should she receive?

Ⓕ \$3.05
 Ⓖ \$3.00
 Ⓗ \$2.05
 Ⓘ \$1.05



Extended-Response Test

Demonstrate your knowledge by giving a clear, concise solution to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another piece of paper.

1. a. Explain how you estimate sums or differences of decimals.

- b. Explain how you determine whether your estimate is an overestimate or underestimate.

- c. Give an example of when it might be appropriate to estimate an answer rather than provide the exact answer.

2. Explain the difference between the Commutative Property of Addition and the Associative Property of Addition.

3. a. Write a real-world word problem that can be solved by adding 12.49 and 8.43. Describe what the solution means.

- b. Write a real-world word problem that can be solved by subtracting 12.4 from 35.05. Describe what the solution means.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

Show the student the following menu.

Lunch Menu	
Item	Cost
Milk	\$0.85
Fruit	\$1.25
Pizza	\$1.35
Salad	\$2.45
Sandwich	\$2.95
Taco	\$1.55
Juice box	\$0.95
Yogurt	\$0.85

1. Round the cost of a yogurt and milk. Then add the two items together. If you had \$2, would you have enough to pay for them?

2. Tell how you got your answer.

3. What is the total cost of a juice box and a sandwich?

4. Tell how you got your answer.

Oral Assessment *(continued)*

5. What is the total cost of milk, fruit, and pizza?

6. Tell how you got your answer.

7. How much more is a sandwich than a yogurt?

8. Tell how you got your answer.

9. If you had \$6, would you have enough money to buy a salad and a sandwich?

10. Tell how you got your answer.

11. What is the total cost of 2 yogurts, 1 milk, and 1 taco?

12. Tell how you got your answer.

Am I Ready?

Practice

Multiply.

1. $17 \times 42 =$ _____

2. $29 \times 13 =$ _____

3. $680 \times 10 =$ _____

4. $31 \times 28 =$ _____

5. $54 \times 20 =$ _____

6. $206 \times 32 =$ _____

7. Skirts are on sale for \$16 each. How much will 3 skirts cost?

8. Sydney bought 6 tickets to an amusement park for his family. Each ticket cost \$18. How much did Sydney spend?

Divide.

9. $105 \div 15 =$ _____

10. $95 \div 5 =$ _____

11. $88 \div 11 =$ _____

12. $1,200 \div 10 =$ _____

13. $472 \div 8 =$ _____

14. $120 \div 5 =$ _____

15. Abby ordered 4 new bats for the girls' softball team. The cost before tax was \$104. If each bat cost the same amount, how much did each bat cost?

Round each decimal to the nearest whole number.

16. $9.7 =$ _____

17. $6.2 =$ _____

18. $3.6 =$ _____

19. $2.27 =$ _____

20. $18.78 =$ _____

21. $8.4 =$ _____

Am I Ready?

Review

Multiply 37×12 .

Step 1 **Multiply 37 by 2.**

$$\begin{array}{r} 1 \\ 37 \\ \times 12 \\ \hline 74 \end{array}$$

$2 \times 7 \text{ ones} = 14 \text{ ones}$

$2 \times 3 \text{ tens} = 6 \text{ tens}$

$14 \text{ ones} = 1 \text{ ten and } 4 \text{ ones}$

$6 \text{ tens} + 1 \text{ ten} = 7 \text{ tens}$

Step 2 **Multiply 37 by 10.**

$$\begin{array}{r} 37 \\ \times 12 \\ \hline 74 \\ + 370 \\ \hline \end{array}$$

$10 \times 7 \text{ ones} = 70 \text{ ones}$

$10 \times 3 \text{ tens} = 30 \text{ tens}$

$70 \text{ ones} = 7 \text{ tens and } 0 \text{ ones}$

$30 \text{ tens} + 7 \text{ tens} = 37 \text{ tens}$

$37 \text{ tens} = 3 \text{ hundreds and } 7 \text{ tens}$

Step 3 **Add.**

$$\begin{array}{r} 37 \\ \times 12 \\ \hline 74 \\ + 370 \\ \hline 444 \end{array}$$

Multiply.

1. $48 \times 47 =$ _____ 2. $66 \times 38 =$ _____ 3. $83 \times 10 =$ _____

4. $256 \times 24 =$ _____ 5. $18 \times 16 =$ _____ 6. $20 \times 19 =$ _____

7. $12 \times 59 =$ _____ 8. $491 \times 62 =$ _____ 9. $74 \times 31 =$ _____

10. $95 \times 27 =$ _____ 11. $543 \times 10 =$ _____ 12. $607 \times 15 =$ _____

Am I Ready?

Apply

Solve.

1. Jason bought 3 sandwich trays for a party. If each tray cost \$24, how much did Jason spend in all?

2. Sabrina practiced the violin 45 minutes each day for 6 days. How many minutes did she practice in all?

3. Kelsey opened a bag of marbles that included red, yellow, green, and blue marbles. There were 144 marbles in all. If there was an equal number of each color of marble, how many of each color of marble were in the bag?

4. Thalia spent a total of \$63 last month for lunch at school. Each lunch cost the same amount. If she bought her lunch 21 times, how much is a lunch at Thalia's school?

5. Mason buys a computer game that costs \$19. He wants to save his money to buy 6 more games at that amount. How much money does Mason need to save?

6. Natalie donated 10 DVDs to a charity fundraiser. The value of the DVDs was \$130. If each DVD had the same value, what was the value of each DVD?

7. Andrew bought a bicycle to ride on his paper route. He paid \$99.32 for the bicycle. What is the price of the bicycle, rounded to the nearest dollar?

8. Jalissa ran 7.8 kilometers in a race. About how many kilometers did she run, rounded to the nearest whole number?

Diagnostic Test

Multiply.

1. $15 \times 30 =$ 1. _____

2. $460 \times 10 =$ 2. _____

3. $52 \times 40 =$ 3. _____

4. $12 \times 26 =$ 4. _____

5. Janelle is selling books for \$12 each. How much will she make if she sells 6 books? 5. _____

Divide.

6. $117 \div 9 =$ 6. _____

7. $75 \div 5 =$ 7. _____

8. $496 \div 8 =$ 8. _____

9. $42 \div 6 =$ 9. _____

10. Tarrin spent \$156 on 4 pairs of jeans. If each pair cost the same amount, how much did one pair of jeans cost? 10. _____

Round each decimal to the nearest whole number.

11. 7.8 11. _____

12. 5.43 12. _____

13. 16.4 13. _____

Pretest

Estimate each product or quotient.

1. $3 \times \$2.10 =$ 1. _____

2. $14.5 \times 3 =$ 2. _____

3. $\$18.20 \div 3 =$ 3. _____

4. $72.4 \div 9 =$ 4. _____

Multiply or divide.

5. $7 \times 0.4 =$ 5. _____

6. $2.8 \times 9 =$ 6. _____

7. $0.7 \times 0.6 =$ 7. _____

8. $1.5 \times 2.3 =$ 8. _____

9. $3.57 \div 0.7 =$ 9. _____

10. $0.83 \div 0.4 =$ 10. _____

Find each product or quotient.

11. $0.42 \times 10 =$ 11. _____

12. $1.63 \times 0.01 =$ 12. _____

13. $11.4 \div 100 =$ 13. _____

14. $5.3 \div 1,000 =$ 14. _____

Divide. Round to the nearest tenth if necessary.

15. $4 \overline{)37.22}$ 15. _____

16. $22 \overline{)5.48}$ 16. _____

Check My Progress *(Lessons 1 through 5)***Estimate each product.**

1. $5 \times \$4.43 =$ 1. _____

2. $\$16.50 \times 2 =$ 2. _____

3. $3.3 \times 6 =$ 3. _____

4. $10 \times 24.9 =$ 4. _____

Multiply. Check for reasonableness.

5. $7 \times 0.6 =$ 5. _____

6. $53 \times 1.9 =$ 6. _____

7. $3.7 \times 4 =$ 7. _____

8. $5 \times 0.02 =$ 8. _____

9. $4.32 \times 5.6 =$ 9. _____

10. $0.12 \times 0.83 =$ 10. _____

11. $2.13 \times 100 =$ 11. _____

12. $15.6 \times 0.01 =$ 12. _____

Check My Progress (Lessons 6 through 9)**Find each product.**

1. $0.36 \times 100 =$ 1. _____

2. $5.18 \times 10^2 =$ 2. _____

3. $1.09 \times 10^2 =$ 3. _____

4. $6.74 \times 10^3 =$ 4. _____

Estimate each quotient.

5. $\$35.72 \div 6 =$ 5. _____

6. $\$10.01 \div 9 =$ 6. _____

7. $87.4 \div 8 =$ 7. _____

8. $129.5 \div 13 =$ 8. _____

Look for a pattern to solve.

9. Darwin will arrive at the bus station after 4 P.M.
Buses arrive every 35 minutes beginning at 6:00 A.M.
When will Darwin's bus arrive? 9. _____

10. Philip did 14 sit-ups on Monday, 21 sit-ups on Tuesday,
and 28 sit-ups on Wednesday. If the pattern continues,
how many sit-ups will he do on Friday? 10. _____

Vocabulary Test

Write the meaning of each bold-faced word or phrase on the line below it.

1. When estimating, it is best to use **compatible numbers**.

2. When dividing by a **decimal**, first change the divisor into a whole number.

3. Line up the **decimal point** in the division problem before dividing.

4. The students were asked to find the **dividend** in the equation $45 \div 5$.

5. Because there is a decimal point in 8.72×10 , I used **powers of 10** to solve.

6. I showed my friend how to find the **product** of 7×8.5 .

7. To find the **quotient** of $26.4 \div 4$, you might round and divide mentally.

8. **Rounding** numbers is necessary when estimating the product of decimals.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

Which is the best estimate of each expression?

1. $6 \times \$3.52 =$

A. \$10

C. \$24

B. \$12

D. \$30

1. _____

2. $4.6 \times 3 =$

F. 9

H. 18

G. 15

I. 21

2. _____

3. $\$21.05 \div 4 =$

A. \$5

C. \$7

B. \$6

D. \$8

3. _____

What is the value of each expression?

4. $7 \times 0.8 =$

F. 5.6

H. 7

G. 6.3

I. 56

4. _____

5. $2.9 \times 5 =$

A. 15.5

C. 14.9

B. 15

D. 14.5

5. _____

6. $43 \times 2.8 =$

F. 86.8

H. 126.2

G. 120.4

I. 129

6. _____

7. $5.25 \times 4.2 =$

A. 20

C. 22.05

B. 22.47

D. 20.45

7. _____

Chapter Test, Form 1A *(continued)*

8. $11 \overline{)135.3}$

F. 10.28

H. 12.1

G. 11.3

I. 12.3

8. _____

9. $6.8 \div 100 =$

A. 6.8

C. 0.068

B. 0.68

D. 0.0068

9. _____

10. $21.7 \div 10 =$

F. 0.217

H. 21.7

G. 2.17

I. 217

10. _____

11. $0.84 \div 0.3 =$

A. 2.8

C. 3.1

B. 2.9

D. 3.7

11. _____

12. A watermelon weighs 19.8 pounds. About how much do 4 watermelons weigh?

F. 40 pounds

H. 70 pounds

G. 60 pounds

I. 80 pounds

12. _____

13. Taika and her 4 friends bought a package of crackers for \$3.69. How much will each friend pay to the nearest cent if the cost is divided equally?

A. \$0.73

C. \$0.92

B. \$0.74

D. \$0.93

13. _____

14. Mack earned \$50.70 mowing lawns. If he earned \$8.45 for each lawn he mowed, how many lawns did Mack mow?

F. 4 lawns

H. 6 lawns

G. 5 lawns

I. 7 lawns

14. _____

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

Which is the best estimate of each expression?

1. $5 \times \$4.31 =$

A. \$15

C. \$23

B. \$20

D. \$25

1. _____

2. $3.5 \times 6 =$

F. 24

H. 36

G. 30

I. 42

2. _____

3. $\$24.21 \div 3 =$

A. \$5

C. \$7

B. \$6

D. \$8

3. _____

What is the value of each expression?

4. $8 \times 0.9 =$

F. 0.72

H. 8

G. 7.2

I. 9

4. _____

5. $2.7 \times 6 =$

A. 12

C. 18

B. 16.2

D. 19

5. _____

6. $41 \times 2.4 =$

F. 0.984

H. 98.4

G. 9.84

I. 984

6. _____

7. $6.25 \times 3.2 =$

A. 20

C. 20.45

B. 20.27

D. 21

7. _____

Chapter Test, Form 1B *(continued)*

8. $12 \overline{)123.6}$

F. 11.3

H. 10.3

G. 11.5

I. 10.2

8. _____

9. $5.9 \div 10 =$

A. 0.059

C. 5.9

B. 0.59

D. 59

9. _____

10. $23.6 \div 100 =$

F. 0.236

H. 236

G. 2.36

I. 2,360

10. _____

11. $0.73 \div 0.2 =$

A. 0.146

C. 3.65

B. 2.9

D. 36.5

11. _____

12. A cantaloupe weighs 3.8 pounds. About how much do 5 cantaloupes weigh?

F. 10 pounds

H. 30 pounds

G. 20 pounds

I. 40 pounds

12. _____

13. Tyanne and her 3 friends bought a package of pencils for \$2.56. How much will each friend pay to the nearest cent if the cost is divided equally?

A. \$0.85

C. \$0.75

B. \$0.82

D. \$0.64

13. _____

14. Norman earned \$52.25 walking dogs. If he earned \$4.75 for each dog he walked, how many dogs did Norman walk?

F. 8 dogs

H. 10 dogs

G. 9 dogs

I. 11 dogs

14. _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression?

1. $6 \times 0.04 =$

A. 0.024

C. 2.4

B. 0.24

D. 24

1. _____

2. $0.13 \times 0.74 =$

F. 0.0962

H. 9.62

G. 0.962

I. 96.2

2. _____

3. $2.15 \times 100 =$

A. 0.215

C. 21.5

B. 2.15

D. 215

3. _____

4. $14.8 \times 0.01 =$

F. 0.0148

H. 1.48

G. 0.148

I. 14.8

4. _____

5. $43.5 \div 3 =$

A. 14.5

C. 11.5

B. 12.2

D. 145

5. _____

6. $65.2 \div 8 =$

F. 7.11

H. 8.15

G. 7.12

I. 8.16

6. _____

7. $109.4 \div 1,000 =$

A. 0.01094

C. 1.094

B. 0.1094

D. 10.94

7. _____

8. $0.79 \div 0.4 =$

F. 0.19

H. 1.88

G. 0.22

I. 1.975

8. _____

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

9. $212.8 \div 3.8 =$ 9. _____
10. $14.6 \div 0.8 =$ 10. _____
11. A company made \$675 in ticket sales. They sold 100 tickets. How much did the company make per ticket, if each ticket cost the same amount? 11. _____
12. Annabelle's house is 0.4 mile from the school. The distance from her house to the grocery store is 10 times the distance from the school. What is the distance from Annabelle's house to the grocery store? 12. _____
13. Shannon exercises for 0.75 hour on Monday, Wednesday, and Friday each week. How many hours will she exercise in 4 weeks? 13. _____
14. There are 19.6 grams of protein in 4 ounces of cashews. About how many grams of protein are in one ounce of cashews? 14. _____
15. Neal spent \$94.80 on 6 tickets to the water park. What was the cost of one ticket? 15. _____
16. Kay bought 7.63 pounds of dried fruit. How much will she put in each bag if she needs to equally divide the amount into 10 bags? 16. _____
17. A recipe calls for 1.75 cups of sugar to make a cake. How many cups of sugar are needed for 4 cakes? 17. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression?

1. $5 \times 0.03 =$

A. 0.0015

C. 0.15

B. 0.015

D. 1.5

1. _____

2. $0.14 \times 0.63 =$

F. 88.2

H. 0.882

G. 8.82

I. 0.0882

2. _____

3. $3.24 \times 10 =$

A. 324

C. 3.24

B. 32.4

D. 0.324

3. _____

4. $12.7 \times 0.1 =$

F. 0.0127

H. 1.27

G. 0.127

I. 12.7

4. _____

5. $44.3 \div 2 =$

A. 11.15

C. 20.1

B. 12.1

D. 22.15

5. _____

6. $56.4 \div 6 =$

F. 9.2

H. 9.6

G. 9.4

I. 9.8

6. _____

7. $108.6 \div 100 =$

A. 1.086

C. 108.6

B. 10.86

D. 1,086

7. _____

8. $0.69 \div 0.3 =$

F. 2.3

H. 1.23

G. 2.23

I. 0.23

8. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Estimate.

1. $\$19.75 \times 6 =$ 1. _____
2. $9 \times 21.3 =$ 2. _____
3. The Butcher family drinks 473.2 ounces of water each week.
About how many ounces of water will they drink in 4 weeks? 3. _____

Multiply.

4. $1.9 \times 8 =$ 4. _____
5. $0.76 \times 5 =$ 5. _____
6. $5 \text{ ft} \times 3.72 \text{ ft} =$ 6. _____
7. $0.22 \times 0.81 =$ 7. _____
8. $5.23 \times 0.6 =$ 8. _____
9. Pele is buying a pack of gum that costs \$0.65. The sales tax is found by multiplying the cost of the gum by 0.07.
What is the sales tax on the gum? 9. _____
10. $21.4 \times 0.001 =$ 10. _____
11. $1.65 \times 100 =$ 11. _____
12. Mark is making payments on a new mountain bike. He needs to make 10 equal payments of \$20.69 each. What is the total cost of the bike? 12. _____

Estimate.

13. $71.9 \div 8 =$ 13. _____
14. $0.79 \div 0.4 =$ 14. _____
15. Cam buys 3 CDs for \$26.77. If each CD costs the same amount, about how much does each CD cost? 15. _____

Chapter Test, Form 3A *(continued)***Divide. Round to the nearest tenth if necessary.**

16. $65.2 \div 26 =$ 16. _____

17. $241.5 \div 14 =$ 17. _____

18. $323.6 \div 47 =$ 18. _____

19. Sydney bought 5 books for \$79.75. If each book cost the same amount, find the price of each book. 19. _____

Find each quotient .

20. $27.3 \div 1,000 =$ 20. _____

21. $8.4 \div 10 =$ 21. _____

22. $0.65 \div 100 =$ 22. _____

23. Tucker is buying dog food at the pet store. Puppy Power is \$24.49 for 10 pounds. Nibbles is \$1.99 per pound. Which brand is the better buy? 23. _____

Divide.

24. $6.96 \div 3.2 =$ 24. _____

25. $1.204 \div 0.35 =$ 25. _____

26. $0.5 \div 0.04 =$ 26. _____

27. $15.75 \div 0.21 =$ 27. _____

28. Vance drove 137.2 miles to his mother's house. His car used 4.9 gallons of gas. How many miles per gallon did Vance's car get? 28. _____

29. On Saturday, Tina rode her bike 2.9 miles on the bike trail. If the entire bike ride took her 43.5 minutes, how long did it take her to ride each mile? 29. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Estimate.

1. $\$16.25 \times 5 =$ 1. _____
2. $8 \times 22.3 =$ 2. _____
3. The Thomas family drinks 524.2 ounces of water each week.
About how many ounces of water will they drink in 5 weeks? 3. _____

Multiply.

4. $2.8 \times 7 =$ 4. _____
5. $0.53 \times 6 =$ 5. _____
6. $6 \text{ ft} \times 4.73 \text{ ft} =$ 6. _____
7. $0.13 \times 0.72 =$ 7. _____
8. $5.23 \times 0.6 =$ 8. _____
9. Ramy is buying a snack that costs \$0.95. The sales tax is found by multiplying the cost of the snack by 0.06.
What is the sales tax on the snack? 9. _____
10. $23.6 \times 0.001 =$ 10. _____
11. $1.83 \times 100 =$ 11. _____
12. Mark is making payments on a new game system. He needs to make 10 equal payments of \$32.59 each.
What is the total cost of the game system? 12. _____

Estimate.

13. $62.8 \div 9 =$ 13. _____
14. $0.58 \div 0.2 =$ 14. _____
15. Selma buys 4 DVDs for \$59.96. If each DVD costs the same amount, about how much does each DVD cost? 15. _____

Chapter Test, Form 3B *(continued)***Divide. Round to the nearest tenth if necessary.**

16. $57.3 \div 24 =$ 16. _____

17. $138.5 \div 16 =$ 17. _____

18. $234.4 \div 35 =$ 18. _____

19. Tamika bought 4 magazines for \$39.40. If each magazine cost the same amount, find the price of each magazine. 19. _____

Find each quotient .

20. $36.4 \div 1,000 =$ 20. _____

21. $7.8 \div 100 =$ 21. _____

22. $0.95 \div 10 =$ 22. _____

23. Sean is buying cat food at the pet store. Fluffy Kitty is \$14.59 for 10 pounds. Puff Chow is \$1.86 per pound. Which brand is the better buy? 23. _____

Divide.

24. $7.84 \div 3.2 =$ 24. _____

25. $2.403 \div 0.45 =$ 25. _____

26. $0.6 \div 0.03 =$ 26. _____

27. $14.95 \div 0.23 =$ 27. _____

28. Wally drove 286.4 miles to his dad's house. His car used 8.95 gallons of gas. How many miles per gallon did Wally's car get? 28. _____

29. On Saturday, Noel rode his bike 8.9 miles on the bike trail. If the entire bike ride took him 115.7 minutes, how long did it take him to ride each mile? 29. _____

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. Alex wants to buy some computer games at the store. Each game costs \$26.85. How much money does Alex need to purchase 4 computer games?



- (A) \$100 (C) \$104
 (B) \$100.40 (D) \$107.40

2. Leigh biked 7.5 miles each day for 3 days. How many miles did she bike altogether?



- (F) 24 miles (H) 22.5 miles
 (G) 23.5 miles (I) 22 miles

3. The students at McKinley School collected \$2,389.64 during a fundraiser. The money will be divided equally between two charities. Rounded to the nearest hundred dollars, about how much money will the students donate to each charity?

- (A) \$1,000
 (B) \$1,194.82
 (C) \$1,200
 (D) \$5,000

4. One pineapple weighs 1.8 pounds. About how much would four pineapples weigh?



- (F) 4 pounds (H) 4.8 pounds
 (G) 8 pounds (I) 2.2 pounds

5. Richard lives 14.3 miles from the museum. He lives 10 times that distance from the nearest zoo. How many miles away does Richard live from the nearest zoo?



- (A) 1,430 miles (C) 14.3 miles
 (B) 143 miles (D) 14,300 miles

6. Chandler ran for 23 minutes on Monday, 28 minutes on Wednesday, and 33 minutes on Friday. If this pattern continues, for how many minutes will he run on Sunday?

- (F) 43 minutes
 (G) 38 minutes
 (H) 30 minutes
 (I) 48 minutes



GO ON ►

Standardized Test Practice *(continued)*

7. The circus made \$14,250 in ticket sales one weekend. They sold 1,000 tickets. How much did the circus make per ticket, if each ticket cost the same amount?



- (A) \$142.50 (C) \$1.43
 (B) \$14.00 (D) \$14.25

10. A pair of shoes costs \$70. To find the sales tax, multiply the cost by 0.06. How much sales tax would you pay when purchasing the shoes?



- (F) \$4.72
 (G) \$74.20
 (H) \$0.42
 (I) \$4.20

8. An average person uses 11.6 gallons of water during a bath. How many gallons of water would an average person use for 7 baths?



- (F) 11.2 gallons (H) 81.2 gallons
 (G) 77.1 gallons (I) 82 gallons

11. Find the area of a lawn that is 62 feet long by 57.3 feet wide.
 $A = \text{length} \times \text{width}$

- (A) 3,552.6 square feet
 (B) 3,534 square feet
 (C) 2,976 square feet
 (D) 2,900 square feet

9. Louise has \$62. She wants to buy some movies at the store. If each movie costs \$15.50, how many movies can Louise buy?



- (A) 5 movies (C) 3 movies
 (B) 4 movies (D) 2 movies

12. There are 9.6 grams of protein in a serving of trail mix. How many grams of protein are in 3 servings of the trail mix?

- (F) 30 grams
 (G) 28.8 grams
 (H) 27.6 grams
 (I) 27 grams



Extended-Response Test

Demonstrate your knowledge by giving clear, concise solutions to each problem. Be sure to include all relevant drawings and to justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another sheet of paper.

1. Sandy wants to buy 5 video games. Each game costs \$24.99. She has \$115.

a. Estimate the cost of 5 video games using compatible numbers.

b. Does Sandy have enough money to buy 5 video games? Explain.

c. Is your estimate higher or lower than the actual product? Explain.

2. There are 7.8 feet of wrapping paper on a roll. Samantha wants to find how long each piece would be if she cut the paper into 3 equal pieces.

a. Explain how to use a decimal model to show $7.8 \div 3$.

b. How many are in each group?

c. Explain how you can use estimation to help you check the reasonableness of your answer.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

Four students completed a relay race in 3.6 minutes.

1. Assuming each student ran the same speed, use mental math to estimate about how many minutes each student ran.

2. Tell how you got your answer.

3. Is your estimate less or greater than the exact answer?

4. Is it possible to have more than one estimate for this problem? Explain.

Use base-ten blocks to find $3.6 \div 4$.

5. How many tenths are in each group?

6. Write a division problem based on what we have talked about above.

Oral Assessment *(continued)*

7. How can you check the reasonableness of your quotient?

8. How do you know that your quotient is reasonable?

Mackenzie solved 55.14×2.1 and got 11.5794 as her answer.

9. Is her answer correct?

10. Explain your answer.

11. Find 55.14×2.1 .

12. Is your answer reasonable?

Am I Ready?

Practice

Find the missing number.

1. $8 + \underline{\hspace{2cm}} = 12$

2. $\underline{\hspace{2cm}} - 7 = 9$

3. $36 - \underline{\hspace{2cm}} = 17$

4. $\underline{\hspace{2cm}} + 6 = 32$

5. $24 - \underline{\hspace{2cm}} = 9$

6. $\underline{\hspace{2cm}} - 17 = 8$

7. Colton has \$125 to spend on sports equipment. He bought a skateboard for \$75 and a helmet for \$30. How much does Colton have left to spend? _____

8. Sydney scored 45 points in her last three basketball games. She scored 12 the first game and 18 the second game. How many points did she score in the third game? _____

Identify each pattern.

9. 19, 17, 15, 13....

10. 6, 10, 14, 18....

11. 13, 26, 39, 52....

12. Wyatt deposits his allowance in the bank each week. What is the rule for the pattern shown in his bank account?

Am I Ready?

Review

Find the missing number.

$$24 + \blacksquare = 35$$

$35 - 24 = 11$. So, $24 + 11 = 35$

1. $16 + \square = 29$

2. $\square + 11 = 25$

3. $41 - \square = 27$

4. $16 + \square = 28$

5. $\square + 18 = 27$

6. $\square + 24 = 54$

7. $\square + 17 = 25$

8. $\square + 11 = 18$

9. Mia and her mother baked 2 batches of cookies. Each batch had 12 cookies. Mia's brother ate some cookies. They have 18 cookies left. How many cookies did Mia's brother eat?
-

10. The McKenna family picked 27 baskets of strawberries on Saturday. Mr. McKenna used some of the baskets to make jam. There are 13 baskets left? How many baskets did Mr. McKenna use to make jam?
-

Am I Ready?

Apply

Solve.

1. Liam rode his bike 16 miles this week. He rode 7 miles on Friday and the rest on Saturday. How many miles did he ride his bike on Saturday?

2. Ella bought 26 tickets for rides at the carnival. She used 13 tickets and gave the rest of the tickets to her sister. How many tickets did she give to her sister?

3. Landon spends \$7 at the fair. He buys a bag of popcorn for \$3 and a bottle of sports drink. How much money does he spend on the bottle of sports drink?

4. Aiden bought 11 pencils and 24 pieces of chalk at the art store. How many items did he buy in all?

5. Madelyn and her dad picked apples over the weekend. Madelyn picked 14 apples and her dad picked 22 apples. On the way home they both ate 2 apples. How many apples did they have left?

6. Avery is counting the birds in her back yard. She counts 9 blue jays, 5 robins and 4 yellow finches. How many total birds did she count?

Diagnostic Test

Find the missing number. Write your answers on the lines provided.

1. $9 + \square = 15$

2. $\square - 8 = 14$

3. $16 - \square = 12$

1. _____

2. _____

4. $\square - 5 = 11$

5. $35 + \square = 42$

6. $21 - \square = 8$

3. _____

4. _____

5. _____

7. Trinity has \$175 to spend on clothes for school. She bought a jacket for \$79 and two sweaters for \$40 each. How much does Trinity have left to spend?

6. _____

7. _____

8. Alexander's football team scored 34 points in their last game. They scored 14 points during the first quarter, 3 points in the second quarter and 7 points in the third quarter. How many points did they score in the fourth quarter?

8. _____

Identify each pattern.

9. 17, 14, 11, 8....

10. 6, 13, 20, 27....

11. 11, 31, 51, 71....

9. _____

10. _____

12. Reanne earns an allowance each week. What is the rule for the pattern shown in the table?

11. _____

12. _____

Allowance Earned				
Week	1	2	3	4
Amount (\$)	25	50	75	100

Pretest

Evaluate each expression.

1. $7 - 2 =$

2. $5^2 \div 5 =$

1. _____

2. _____

3. What do you notice about the number of chairs each time a row is added to the table below?

3. _____

rows	1	2	3	4	5
chairs	5	10	15	20	25

Find the value of each expression.

4. $(16 - 6) \times 4 =$

5. $(12 \div 2) - (2 \times 2) =$

4. _____

5. _____

Solve each equation. Check your solution.

6. $56 = 8 \times \square$

7. $13 = \square - 2$

6. _____

7. _____

8. $\square + 19 = 27$

9. $\square \div 3 = 6$

8. _____

9. _____

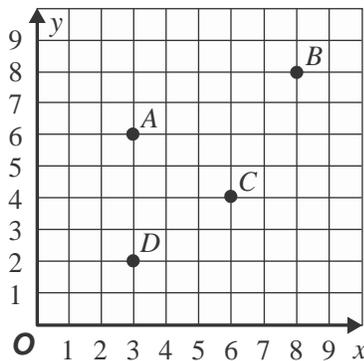
Locate and name each point.

10. *A*

11. *B*

12. *C*

13. *D*



10. _____

11. _____

12. _____

13. _____

14. Put the following operations in the order you would use them when evaluating expressions: add, parentheses, exponent, divide.

14. _____

Check My Progress *(Lessons 1 through 4)***Find the value of each expression.**

1. $18 - (3 \times 4) =$ 1. _____

2. $(10^2 - 2) \div 2 =$ 2. _____

3. $(10 - 8) \times 7 =$ 3. _____

4. $(18 \div 2) \times 8 =$ 4. _____

Write each phrase as a numerical expression.

5. divide 15 by 3, then add 4. 5. _____

6. multiply 12 by 2, then subtract 13 6. _____

7. subtract 6 from 24, then divide by 3 7. _____

8. multiply 8 by 7, then subtract 26 8. _____

Solve each problem by working backward.

9. Lena is 4 years older than her brother Sebastian. Sebastian is 3 years older than their sister Carmen. Carmen is 9 years younger than their brother Eduardo. If Eduardo is 22 years old, how old is Lena? 9. _____

10. Members of the basketball team sold raffle tickets to raise money for new equipment. The first 30 tickets sold for \$5 each. To sell more tickets, the players lowered the price of each ticket to \$3. If the team raised a total of \$285, how many \$3 tickets were sold? 10. _____

Vocabulary Test

Use context clues to write a description for each bold faced vocabulary word.

1. The math test asked students to find the next **term** in the pattern: 5, 10, 15, ...

2. The students were asked to **evaluate** the following: $x + 3$ if $x = 4$.

3. The following **expression** shows a variable and a number: $n + 12$.

4. Is the **sequence** 2, 4, 6, 8, ... an increasing or decreasing pattern?

5. The students were asked why the **ordered pair** is important when plotting points on a graph.

6. The students were given the following expression to evaluate and asked to identify the **order of operations**: $10 - (2 \times 6)$.

7. The students were asked to plot the ordered pairs on the **coordinate plane**.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

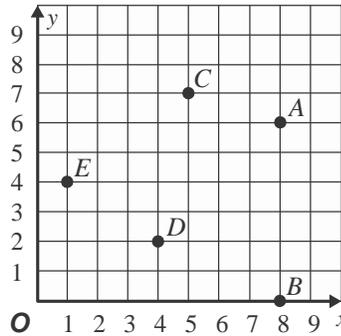
1. What is the value of the expression $4 \times (9 - 2)$?

- A. 16 C. 20
 B. 18 D. 28

1. _____

Use the coordinate plane for Exercises 2-4.

What is the name of each point?



2. $(5, 7)$

- F. A H. C
 G. B I. D

2. _____

3. $(8, 0)$

- A. A C. C
 B. B D. D

3. _____

4. Name the coordinate for point A.

- F. $(1, 4)$ H. $(8, 0)$
 G. $(4, 2)$ I. $(8, 6)$

4. _____

5. School uniforms cost \$15 plus a one-time \$5 fee if you get your initials embroidered on the collar. How much did Garrison pay if he ordered 4 embroidered uniforms?

- A. \$80 C. \$60
 B. \$65 D. \$55

5. _____

Evaluate each expression.

6. $45 + 36 \div 9$

- F. 9 H. 1
 G. 49 I. 41

6. _____

7. $(12 - 4) \times [(6 + 15) \div 3]$

- A. 56 C. 17
 B. 88 D. 21

7. _____

Chapter Test, Form 1A *(continued)*

8. $16 \times 4 \div 4^2$

F. 16

H. 4

G. 8

I. 32

8. _____

9. What are the next three terms in the following sequence?

7, 13, 19, 25,...

A. 30, 37, 43

C. 31, 37, 43

B. 27, 33, 49

D. 29, 33, 37

9. _____

10. What is the value of the expression $10 + (6 \div 3)$?

F. 8

H. 11

G. 10

I. 12

10. _____

11. Stephen earns \$6 an hour mowing grass. He earned a total of \$30 last week. How many hours did he mow grass?

A. 180 hours

C. 5 hours

B. 24 hours

D. 36 hours

11. _____

Write each phrase as a numerical expression.

12. add 7 and 3, then multiply by 5

F. $7 + 3 \times 5$

H. $5 \times 7 + 3$

G. $(7 + 3) \times 5$

I. $7 + (3 \times 5)$

12. _____

13. divide 28 by 7, then subtract 2

A. $28 \div 7 + 2$

C. $2 - 28 \div 7$

B. $28 \div (7 - 2)$

D. $28 \div 7 - 2$

13. _____

14. multiply 9 by 5, then add 7

F. $9 \times 7 - 5$

H. $9 \times 7 + 5$

G. $9 \times 5 + 7$

I. $9 \times 5 - 7$

14. _____

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of the expression $3 \times (6 - 4)$?

- A. 3 C. 30
 B. 6 D. 72

1. _____

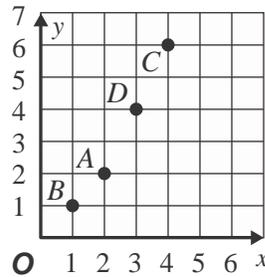
Use the coordinate plane for Exercises 2-4.
 What is the name of each point?

2. (4, 6)

- F. A H. C
 G. B I. D

3. (2, 2)

- A. A C. C
 B. B D. D



2. _____

4. Name the coordinate for point *D*.

- F. (1, 1) H. (3, 4)
 G. (4, 6) I. (2, 2)

3. _____

4. _____

5. School uniforms cost \$25 plus a one-time \$5 fee if you get your initials embroidered on the collar. How much did Bryce pay if he ordered 4 embroidered uniforms?

- A. \$100 C. \$125
 B. \$105 D. \$129

5. _____

Evaluate each expression.

6. $12 - 3 \times 4 + 7$

- F. 8 H. 7
 G. 252 I. 43

6. _____

7. $30 \div 6 + 5^2$

- A. 31 C. 15
 B. 2 D. 30

7. _____

Chapter Test, Form 1B *(continued)*

8. $[5 \times (4 + 8)] - 13$

F. 47

H. 59

G. 15

I. 4

8. _____

9. What are the next terms in the following sequence?

84, 80, 76, 72,...

A. 76, 66, 62

C. 70, 68, 66

B. 68, 64, 60

D. 64, 50, 46

9. _____

10. What is the value of the expression $12 + (8^2 \div 4)$?

F. 14

H. 34

G. 28

I. 80

10. _____

11. Travis earns \$5 an hour mowing grass. He earned a total of \$30 last week. How many hours did he mow grass?

A. 150 hours

C. 25 hours

B. 5 hours

D. 6 hours

11. _____

Write each phrase as a numerical expression.

12. multiply 9 by 6, then add 4

F. $9 \times 6 + 4$

H. $9 \times (6 + 4)$

G. $9 \times 6 - 4$

I. $6 - 4 \times 9$

12. _____

13. add 12 to 8, then divide by 4

A. $4 \div (12 + 8)$

C. $12 + 8 \div 4$

B. $(12 + 8) \div 4$

D. $12 \div 4 + 8$

13. _____

14. divide 40 by 8, then subtract 2

F. $40 \times 8 + 2$

H. $40 \times 8 - 2$

G. $40 \div 8 + 2$

I. $40 \div 8 - 2$

14. _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

Identify the next three terms in each sequence.

1. 3, 9, 27, 81, ...

A. 162, 324, 872	C. 162, 486, 1,458
B. 243, 729, 2,187	D. 243, 486, 972

2. 81, 90, 99, 108, ...

F. 118, 128, 138	H. 118, 127, 136
G. 117, 128, 139	I. 117, 126, 135

3. 95, 88, 81, 74, ...

A. 69, 64, 59	C. 64, 54, 44
B. 67, 59, 51	D. 67, 60, 53

1. _____

2. _____

3. _____

Use the coordinate plane for Exercises 4-6.

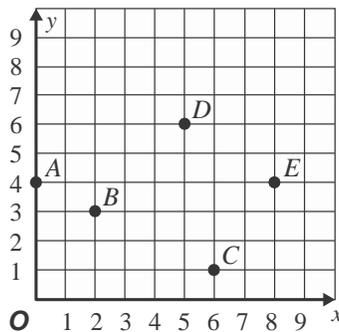
What is the name of each point?

4. (2, 3)

F. A	H. C
G. B	I. D

5. (6, 1)

A. D	C. C
B. B	D. E



4. _____

5. _____

6. Name the coordinate for point A.

- | | |
|-----------|-----------|
| F. (0, 4) | H. (6, 1) |
| G. (2, 3) | I. (5, 6) |

6. _____

What is the value of each expression?

7. $15 + (12 \div 3)$

A. 8	C. 19
B. 10	D. 21

8. $45 - (6 \times 6)$

F. 9	H. 46
G. 87	I. 234

7. _____

8. _____

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

Evaluate each expression.

9. $3 \times 8 \div 4 =$ 9. _____

10. $4 \times 4 - 8 =$ 10. _____

11. What are the next three terms in the following sequence? 3, 6, 12, 24, ... 11. _____

12. Paulette started with \$105 in her savings account. She deposited \$45, withdrew \$50, and then deposited \$20. How much money is in Paulette's savings account now? 12. _____

13. The tallest building in the United States is the Willis Tower located in Chicago, Illinois. The Willis Tower is 1,451 feet tall. The tallest building in the world is Taipei 101 located in Taipei, Taiwan. Taipei 101 is 1,671 feet tall. How many feet taller is Taipei 101 than the Willis Tower? 13. _____

Write each phrase as a numerical expression.

14. add 8 and 32, then divide by 5 14. _____

15. multiply 6 and 7, then subtract 4 15. _____

16. divide 36 by 3, then add 9 16. _____

17. subtract 4 from 39, then divide by 5 17. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

Identify the next three terms in each sequence.

1. 19, 27, 35, 43, ...

A. 53, 63, 73	C. 51, 59, 67
B. 51, 60, 68	D. 52, 61, 70

2. 122, 118, 114, 110, ...

F. 106, 102, 98	H. 105, 100, 95
G. 104, 98, 92	I. 108, 106, 104

3. 5, 10, 20, 40, ...

A. 80, 160, 320	C. 60, 80, 100
B. 80, 120, 160	D. 100, 200, 300

1. _____

2. _____

3. _____

Use the coordinate plane for Exercises 4-6.

What is the name of each point?

4. (0, 3)

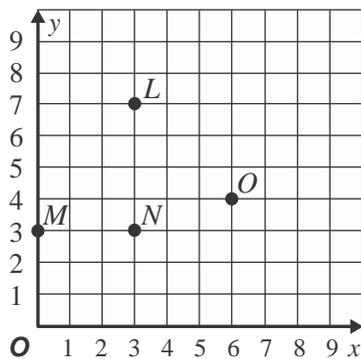
F. <i>L</i>	H. <i>N</i>
G. <i>M</i>	I. <i>O</i>

5. (6, 4)

A. <i>L</i>	C. <i>O</i>
B. <i>M</i>	D. <i>N</i>

6. Name the coordinate for point *L*.

F. (3, 7)	H. (3, 3)
G. (0, 3)	I. (6, 4)



4. _____

5. _____

6. _____

What is the value of each expression?

7. $12 + (14 \div 2) =$

A. 8	C. 21
B. 19	D. 28

8. $32 - (5 \times 6) =$

F. 2	H. 43
G. 93	I. 162

7. _____

8. _____

Chapter Test, Form 2B *(continued)*

Read each question carefully. Write your answer on the line provided.

Evaluate each expression.

9. $3 \times 7 \div 3 =$ 9. _____

10. $4 \times 3 - 7 =$ 10. _____

11. What are the next three terms in the following sequence? 256, 128, 64, 32, ... 11. _____

12. Amy started with \$125 in her savings account. She deposited \$25, withdrew \$15, and then deposited \$30. How much money is in Amy's savings account now? 12. _____

13. The tallest man in the world is about 101 inches tall. The shortest man in the world is about 29 inches tall. How much taller is the tallest man than the shortest man? 13. _____

Write each phrase as a numerical expression.

14. subtract 9 from 25, then add 8 14. _____

15. multiply 7 by 8, then divide by 4 15. _____

16. divide 49 by 7, then add 12 16. _____

17. add 19 and 2, then divide by 7 17. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Write an equation for the following, then solve.

1. Bread costs \$6 per loaf at the bakery. How many loaves can you buy with \$36? 1. _____

2. Cynthia bought 7 posters, which cost \$35. Shipping for each poster cost x dollars. She paid \$49 dollars altogether. How much was shipping for each poster? 2. _____

Find the value of each expression.

3. $10 + (6^3 \div 2) =$ 3. _____

4. $42 - (3^2 \times 3) =$ 4. _____

Evaluate each expression.

5. $3 \times 7 - 6 =$ 5. _____

6. $3^2 + 15 =$ 6. _____

Write each phrase as a numerical expression.

7. divide 81 by 9, then multiply by 3 7. _____

8. subtract 9 from 30, then divide by 7 8. _____

9. multiply 4 by 8, then subtract 6 9. _____

10. add 4 to 11, then divide by 5 10. _____

11. subtract 7 from 12, then multiply by 9 11. _____

Write the next three terms in the sequence.

12. 13, 20, 27, 34,... 12. _____

Chapter Test, Form 3A *(continued)*

Solve.

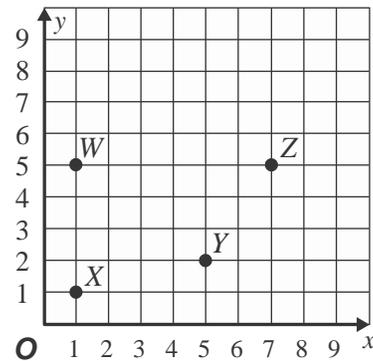
13. To make muffins, you need about 4 cups of flour per dozen. How many cups of flour will you need to make 5 dozen muffins?

13. _____

14. Stewart, Angela, and Thomas each prefer a different type of book. They read history, poetry, and science fiction. Angela does not like poetry. Thomas does not like poetry or science fiction. Which type of book does each person like best?

14. _____

Use the coordinate plane for Exercises 15 and 16.



15. Name the coordinates for point W.

15. _____

16. Which point has the coordinates (1, 1)?

16. _____

Evaluate each expression.

17. $(4 + 3^2) - 10 =$

17. _____

18. $7 \times 8 + (2^3 \div 4) =$

18. _____

19. $50 - 10 \times 3 + 8 =$

19. _____

20. Marisela added 7 seashells to her collection. She now has 68 seashells. Write and solve an equation to find the number of seashells she originally had.

20. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Write an equation for the following, then solve.

1. Shirts are on sale for \$12 at a clothing store. How many shirts can you buy with \$48? 1. _____

2. Pravat bought 4 movies, which cost \$36. Shipping for each movie cost y dollars. He paid \$44 dollars altogether. How much was shipping for each movie? 2. _____

Find the value of each expression.

3. $11 + (3^3 \div 3) =$ 3. _____

4. $14 - (3 \times 2^2) =$ 4. _____

Evaluate each expression.

5. $6 \times 7 - 5 =$ 5. _____

6. $3^3 + 1 =$ 6. _____

Write each phrase as a numerical expression.

7. divide 35 by 7, then multiply by 4 7. _____

8. add 13 to 17, then divide by 3 8. _____

9. subtract 8 from 32, then divide by 6 9. _____

10. multiply 4 by 9, then add 2 10. _____

11. divide 88 by 11, then subtract 7 11. _____

Write the next three terms in the sequence.

12. 126, 117, 108, 99,... 12. _____

Chapter Test, Form 3B *(continued)*

Solve.

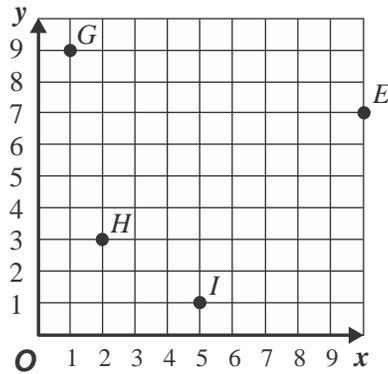
13. To make bread, you need about 6 cups of flour per loaf. How many cups of flour will you need to make 17 loaves?

13. _____

14. Tracy, Kyler, and Yale each prefer a different type of book. They read history, poetry, and science fiction. Yale does not like poetry. Kyler does not like poetry or science fiction. Which type of book does each person like best?

14. _____

Use the coordinate plane for Exercises 15 and 16.



15. Name the coordinates for point *E*.

15. _____

16. Which point has the coordinates (5, 1)?

16. _____

Evaluate each expression.

17. $4 + 7^2 - 8 =$

17. _____

18. $(15 - 3) \times 2^3 =$

18. _____

19. $(4 + 5^2) - (2 \times 12) =$

19. _____

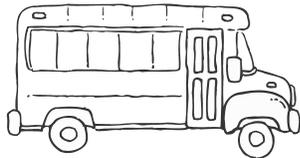
20. Karley added 14 bottle caps to her collection. She now has 54 bottle caps. Write and solve an equation to find the number of bottle caps she originally had.

20. _____

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. A group of 902 students is going on a field trip to the museum. If each bus holds 82 students, how many buses will the students need?



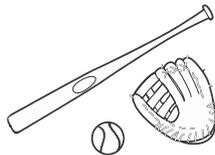
- (A) 9 buses (C) 12 buses
(B) 11 buses (D) 13 buses

2. Sally has some money in her pocket for lunch. She wants to know how much money she will have after buying lunch. What is the missing value in the table?

money before	4	6	8	10	12
money after	0	■	4	6	8

- (F) 1 (H) 3
(G) 2 (I) 4

3. Travis and his three friends go to the baseball game. Each person buys a ticket for \$8, a snack for \$4, and a drink for \$2. Which numerical expression represents the total cost of the trip to the baseball game for Travis and his friends?



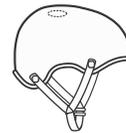
- (A) $4 + (\$8 \times \$4 \times \$2)$
(B) $4 \times (\$8 + \$4 + \$2)$
(C) $(4 \times \$8) + (\$4 \times \$2)$
(D) $(4 \times \$8 + \$4) + (4 \times \$4 + \$2)$

4. Ernesto works at the food bank. He received a donation of 450 cans of food. The food bank now has 934 cans of food. Use the equation $x + 450 = 934$ to find out how many cans of food Ernesto had originally.



- (F) 1,384 cans
(G) 934 cans
(H) 484 cans
(I) 450 cans

5. Cameron bought an electric scooter for \$38.99 and two helmets for \$29.49 each. Write an expression to show how much Cameron spent in all.



- (A) $2 \times (\$38.99 + \$29.49)$
(B) $(2 \times \$38.99) + \29.49
(C) $\$38.99 + \29.49
(D) $\$38.99 + (2 \times \$29.49)$

6. Evaluate the expression.

$$(3 \times 2^2) \times (8 + 1)$$

- (F) 324
(G) 96
(H) 98
(I) 108

Standardized Test Practice *(continued)*

7. Danny is planting tomatoes in his garden. He will plant seven plants in eight rows. What is the number of plants that Danny will plant?



- (A) 56 plants
- (B) 50 plants
- (C) 49 plants
- (D) 42 plants

8. Betty is making a cake. She had 3.75 cups of flour in the bag. She used 2.5 cups of flour to make the cake. How much flour is left in the bag?



- (F) 1.0 cups
- (G) 1.25 cups
- (H) 1.5 cups
- (I) 1.75 cups

9. Adriana rides her bike 2 miles every morning on weekdays. She rides 3 miles on Saturday and Sunday. Which expression shows the number of miles she rides during the week?

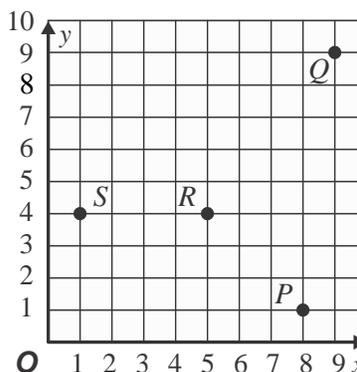
- (A) $(2 \times 2) + (3 \times 5)$
- (B) $(2 \times 3) \times (2 \times 5)$
- (C) $(2 + 3) \times 7$
- (D) $(2 \times 5) + (3 \times 2)$



10. Which represents the next three terms in the sequence 8, 16, 24, 32...?

- (F) 36, 40, 44
- (G) 64, 126, 256
- (H) 40, 48, 56
- (I) 72, 216, 648

Use the coordinate plane for Exercises 11 and 12.



11. Select the coordinates for point P.

- (A) (5, 4)
- (B) (1, 4)
- (C) (9, 9)
- (D) (8, 1)

12. Which point has the coordinates (5, 4)?

- (F) P
- (G) Q
- (H) R
- (I) S



Extended-Response Test

Demonstrate your knowledge by giving a clear, concise solution to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another piece of paper.

1. a. Define the term *sequence*.

- b. Explain how you would finish the sequence 680, 570, 460, ____, ____.

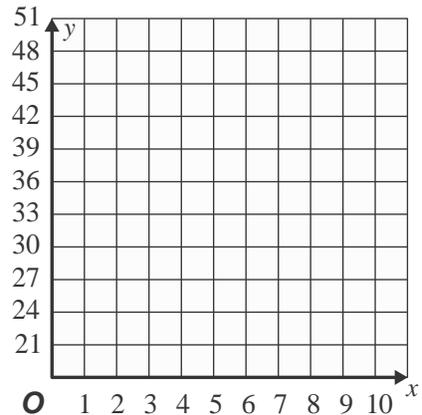
2. Mick earns \$8 per hour. He wants to know how much he would make in a day if he works 3, 4, 5, or 6 hours.

- a. Complete the table for Mick's earnings for 3, 4, 5, and 6 hours.

Number of Hours				
Earnings				

- b. Each term in the sequence was found by _____.

- c. Graph Mick's earning on the coordinate plane.



3. a. Explain, in your own words, the difference between an x -coordinate and a y -coordinate.

- b. Look at the order pair to the right. Label each coordinate.



Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the questions.

1. In the expression $9 + 4$, which operation do you perform first?

2. What is the solution of $9 + 5 \times 4$?

3. Tell how you got your answer.

4. What is the solution of $3^2 + 6 \div 2$?

5. Tell how you got your answer.

6. Serena has a collection of 7 scarves. Her sister has 3 more scarves than Serena. How many scarves does her sister have?

Oral Assessment *(continued)*

7. Tell how you got your answer.

8. Gus is twice as old as Genevieve. If Genevieve is 30, how old is Gus?

9. Tell how you got your answer.

10. You need 100 square feet of flooring to cover the floor in each room.
If you have 400 square feet of flooring, how many rooms can you
cover with new flooring?

11. If you had 300 square feet of flooring, how many rooms could you
cover with new flooring?

12. Tell how you got your answer.

Am I Ready?

Practice

Write the factors of each number.

1. 15 _____

2. 42 _____

3. 9 _____

4. 33 _____

5. 13 _____

6. 10 _____

7. 20 _____

8. 80 _____

9. 100 _____

Multiply or divide.

10. $18 \times 52 =$ _____

11. $36 \times 24 =$ _____

12. $27 \times 19 =$ _____

13. $58 \times 20 =$ _____

14. $570 \times 10 =$ _____

15. $406 \times 37 =$ _____

16. $100 \div 20 =$ _____

17. $1,400 \div 10 =$ _____

18. $75 \div 5 =$ _____

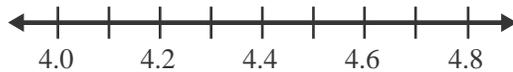
19. $384 \div 8 =$ _____

20. $66 \div 11 =$ _____

21. $180 \div 5 =$ _____

Graph each number on the number line provided.

22. 4.5



23. 2.8



Am I Ready?

Review

Find the factors of 20.

$$20$$

$$1 \times 20$$

$$2 \times 10$$

$$4 \times 5$$

So, the factors of 20 are: 1, 2, 4, 5, 10, and 20.

Find the factors of each number.

1. 6 _____

2. 8 _____

3. 11 _____

4. 15 _____

5. 24 _____

6. 25 _____

7. 30 _____

8. 33 _____

9. 36 _____

10. 40 _____

11. 50 _____

12. 80 _____

Am I Ready?

Apply

Solve.

1. Jeremiah bought 3 sandwiches for lunch. If each sandwich cost \$4, how much did Jeremiah spend in all?

2. Sam practiced the guitar 30 minutes each day for 5 days. How many minutes did he practice in all?

3. Kenny opened a box of popsicles that included red, yellow, green, and orange popsicles. There were 24 popsicles in all. If there was an equal number of each color of popsicle, how many of each color of popsicle were in the bag?

4. Tammi spent a total of \$30 on magazines last week. Each magazine costs the same amount. If she bought 6 magazines, how much did each magazine cost?

5. Manuel buys a video game that costs \$19. He wants to save his money to buy 5 more games at that amount. How much money does Manuel need to save?

6. Stuart donated 10 books to a charity fundraiser. The value of the books was \$80. If each book had the same value, what was the value of each book?

7. Ava was making a scrapbook for her art project. She needed to measure 2.5 inches of ribbon. Place a dot on the ruler to show 2.5 inches.



Diagnostic Test

Write all the factors of each number.

1. 25

2. 49

1. _____

3. 7

4. 34

2. _____

5. 20

6. 60

3. _____

4. _____

5. _____

Multiply or divide.

7. $17 \times 42 =$

8. $31 \times 28 =$

6. _____

7. _____

9. $29 \times 13 =$

10. $54 \times 20 =$

8. _____

9. _____

11. $105 \div 15 =$

12. $1,200 \div 10 =$

10. _____

13. $95 \div 5 =$

14. $472 \div 8 =$

11. _____

12. _____

13. _____

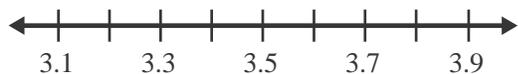
14. _____

Graph each number on the number line provided.

15. 1.3



16. 3.4



Pretest

Tell whether each number is *prime* or *composite*.

1. 24 1. _____

2. 17 2. _____

Write the prime factorization of each number.

3. 28 3. _____

4. 360 4. _____

Find the GCF of each set of numbers.

5. 36, 64 5. _____

6. 15, 45, 75 6. _____

7. 18, 12, 3 7. _____

Write each fraction in simplest form. If the fraction is already in simplest form, write *simplified*.

8. $\frac{5}{25}$ 8. _____

9. $\frac{8}{9}$ 9. _____

Find the LCM of each set of numbers.

10. 14, 7 10. _____

11. 3, 6, 15 11. _____

Write each fraction as a decimal.

12. $\frac{3}{10}$ 12. _____

13. $\frac{1}{5}$ 13. _____

Compare each fraction. Use the symbols $<$, $>$, or $=$.

14. $\frac{3}{5}$ \bullet $\frac{1}{2}$ 14. _____

15. $\frac{2}{3}$ \bullet $\frac{5}{6}$ 15. _____

Check My Progress *(Lessons 1 through 4)*

Represent each situation using a model. Then solve.

- Five people will equally share two pizzas. How much pizza will each person receive? 1. _____
- Mr. Johansen is cutting construction paper for an art project. He has 24 students, and 6 large pieces of construction paper. How much paper will each student receive? 2. _____
- Greg is pouring an entire gallon of milk into 10 glasses. What part of a gallon will be in each glass? 3. _____
- Sara is cutting ribbon for a craft project. She has 4 feet of ribbon, which must be cut into 7 equal lengths. How long will each piece of ribbon be after she has finished cutting? 4. _____

Find the GCF of each set of numbers.

- 6, 36 5. _____
- 12, 24, 36 6. _____
- 9, 18, 27 7. _____
- 40, 50, 60 8. _____

Write each fraction in simplest form. If the fraction is already in simplest form, write *simplified*.

- $\frac{4}{8}$ 9. _____
- $\frac{15}{25}$ 10. _____
- $\frac{8}{9}$ 11. _____

Guess, check, and revise to solve.

- Evan went to the park and saw 4 animals. Each animal was either a duck or a dog. If he saw a total of 14 legs, how many of each animal did he see? 12. _____

Vocabulary Test

Use the word bank below to complete each sentence. Write the correct words in the blank.

Word Bank	
common factor	fraction
denominator	numerator
common multiple	simplest form

1. A number that names equal parts of a whole or parts of a set is called a(n) _____.
2. A whole number that is a multiple of two or more numbers is called a(n) _____.
3. The number above the line of a fraction showing the number of parts of the whole is called a(n) _____.
4. When the numerator and the denominator have no common factor other than 1, the fraction is written in _____.
5. The number below the line of a fraction showing the number of parts the whole is divided into is called a(n) _____.
6. A whole number that is a factor of two or more numbers is called a(n) _____.

Answer the item below based on the vocabulary used in the chapter. **Underline the vocabulary terms you use.**

7. In $\frac{3}{4}$, identify the role of 3. Then explain how to read this number.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which number is a prime number?

- A. 2 C. 14
B. 4 D. 24

1. _____

2. Which number is a composite number?

- F. 7 H. 31
G. 11 I. 36

2. _____

3. What is the simplest form of $\frac{2}{36}$?

- A. $\frac{2}{8}$ C. $\frac{1}{18}$
B. $\frac{1}{4}$ D. $\frac{1}{36}$

3. _____

4. What is the GCF of 3 and 18?

- F. 18 H. 8
G. 12 I. 3

4. _____

What is the prime factorization of each number?

5. 24

- A. $2 \times 2 \times 2 \times 3$ C. 8×3
B. $2 \times 2 \times 3$ D. 6×4

5. _____

6. 36

- F. $2 \times 3 \times 3$ H. 9×4
G. $2 \times 2 \times 3 \times 3$ I. 6×6

6. _____

Chapter Test, Form 1A *(continued)*

7. What is the LCM of 12 and 18?

- A. 28 C. 60
 B. 36 D. 72

7. _____

What symbol replaces each \bigcirc to make a true statement?

8. $\frac{3}{10} \bigcirc \frac{3}{5}$

- F. < G. > H. =

8. _____

9. $\frac{1}{2} \bigcirc \frac{3}{4}$

- A. < B. > C. =

9. _____

10. What decimal is equivalent to $\frac{3}{4}$?

- F. 0.50 H. 0.25
 G. 0.33 I. 0.75

10. _____

11. Sally is pouring an entire gallon of juice into 8 glasses.
 What part of a gallon will be in each glass?

- A. $\frac{1}{2}$ of a gallon C. $\frac{1}{4}$ of a gallon
 B. $\frac{1}{3}$ of a gallon D. $\frac{1}{8}$ of a gallon

11. _____

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which number is a prime number?

A. 10

C. 8

B. 9

D. 7

1. _____

2. Which number is a composite number?

F. 3

H. 7

G. 5

I. 9

2. _____

3. What is the simplest form of $\frac{3}{24}$?

A. $\frac{1}{24}$

C. $\frac{1}{3}$

B. $\frac{1}{8}$

D. $\frac{1}{2}$

3. _____

4. What is the GCF of 6 and 8?

F. 2

H. 4

G. 3

I. 6

4. _____

What is the prime factorization of each number?

5. 35

A. $2 \times 2 \times 7$

C. 2×17

B. $2 \times 2 \times 5$

D. 5×7

5. _____

6. 46

F. 2×23

H. 2×20

G. 3×23

I. 2×18

6. _____

Chapter Test, Form 1B *(continued)*

7. What is the LCM of 12 and 36?

- A. 6 C. 24
 B. 12 D. 36

7. _____

What symbol replaces each \bigcirc to make a true statement?

8. $\frac{2}{8} \bigcirc \frac{1}{4}$

- F. < G. > H. =

8. _____

9. $\frac{3}{10} \bigcirc \frac{1}{8}$

- A. < B. > C. =

9. _____

10. What decimal is equivalent to $\frac{4}{25}$?

- F. 0.25 H. 0.40
 G. 0.16 I. 0.04

10. _____

11. David is pouring an entire gallon of milk into 12 glasses.
 What part of a gallon will be in each glass?

- A. $\frac{1}{24}$ of a gallon C. $\frac{1}{6}$ of a gallon
 B. $\frac{1}{12}$ of a gallon D. $\frac{1}{2}$ of a gallon

11. _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which number is a composite number?

A. 5 C. 13

B. 7 D. 16

1. _____

2. Which number is a prime number?

F. 4 H. 9

G. 6 I. 11

2. _____

3. What is the GCF of 6 and 15?

A. 2 C. 5

B. 3 D. 7

3. _____

What is the fraction in simplest form? If the fraction is already in simplest form, choose *simplified*.

4. $\frac{4}{16}$

F. $\frac{2}{8}$

H. $\frac{1}{8}$

G. $\frac{1}{4}$

I. *simplified*

4. _____

What is the prime factorization of each number?

5. 56

A. 2×7

C. $2 \times 2 \times 2 \times 7$

B. $2 \times 2 \times 7$

D. $2 \times 2 \times 2 \times 7 \times 7 \times 7$

5. _____

6. 98

F. 2×7

H. $2 \times 7 \times 7 \times 7$

G. $2 \times 7 \times 7$

I. $2 \times 2 \times 7 \times 7 \times 7$

6. _____

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

What is the least common multiple (LCM) of each set of numbers?

7. 5, 6

7. _____

8. 3, 6, 8

8. _____

What symbol replaces each \bigcirc to make a true statement?

9. $\frac{2}{3} \bigcirc \frac{2}{5}$

9. _____

10. $\frac{4}{5} \bigcirc \frac{7}{10}$

10. _____

11. Charlotte is making a scrapbook. She needs a piece of ribbon that is $\frac{3}{4}$ ft long. What is that fraction written as a decimal?

11. _____

12. Write $\frac{24}{25}$ as a decimal.

12. _____

13. Write $\frac{1}{2}$ as a decimal.

13. _____

14. Eight people will equally share two pizzas. How much pizza will each person receive?

14. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which number is a composite number?

- A. 7 C. 30
 B. 29 D. 53

1. _____

2. Which number is a prime number?

- F. 31 H. 33
 G. 32 I. 36

2. _____

3. What is the GCF of 8 and 12?

- A. 4 C. 8
 B. 6 D. 12

3. _____

What is the fraction in simplest form? If the fraction is already in simplest form, choose *simplified*.

4. $\frac{3}{24}$

- F. $\frac{2}{8}$ H. $\frac{1}{8}$

- G. $\frac{1}{4}$ I. *simplified*

4. _____

What is the prime factorization of each number?

5. 88

- A. $2 \times 2 \times 2 \times 2 \times 11 \times 11 \times 11$ C. $2 \times 2 \times 2 \times 11 \times 11$

- B. $2 \times 2 \times 2 \times 2 \times 11 \times 11$ D. $2 \times 2 \times 2 \times 11$

5. _____

6. 50

- F. $2 \times 5 \times 5$ H. $2 \times 2 \times 5 \times 5 \times 5$

- G. $2 \times 2 \times 5 \times 5$ I. $2 \times 2 \times 2 \times 5 \times 5 \times 5$

6. _____

Chapter Test, Form 2B *(continued)*

Read each question carefully. Write your answer on the line provided.

What is the least common multiple (LCM) of each set of numbers?

7. 12, 18

7. _____

8. 4, 5, 6

8. _____

What symbol replaces each \bigcirc to make a true statement?

9. $\frac{6}{10} \bigcirc \frac{1}{5}$

9. _____

10. $\frac{2}{5} \bigcirc \frac{4}{10}$

10. _____

11. In science class, Paulette is growing a bean sprout. She measures the height of the sprout in inches every third day. Her measurements are $\frac{2}{10}$, $\frac{4}{5}$, and $\frac{3}{25}$. Write each of these fractions as decimals.

11. _____

12. Write $\frac{13}{25}$ as a decimal.

12. _____

13. Write $\frac{3}{4}$ as a decimal.

13. _____

14. Ten people will equally share three pizzas. How much pizza will each person receive?

14. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Find the greatest common factor (GCF) of each set of numbers.

1. 34, 51, 102

1. _____

2. 18, 27, 63

2. _____

Write each fraction in simplest form. If the fraction is already in simplest form, write *simplified*.

3. $\frac{12}{96}$

3. _____

4. $\frac{28}{185}$

4. _____

Solve.

5. Mr. Ringwald is preparing trail mix for his upcoming hiking trip. The recipe calls for $\frac{3}{4}$ cup of peanuts.

Write $\frac{3}{4}$ as a decimal.

5. _____

6. Jasper measured the height of his dresser as $\frac{20}{25}$ of a yard.

Write $\frac{20}{25}$ as a decimal.

6. _____

Write each fraction as a decimal.

7. $\frac{13}{20}$

7. _____

8. $\frac{27}{50}$

8. _____

Chapter Test, Form 3A *(continued)*

Find the least common multiple (LCM) of each set of numbers.

9. 10, 16, 32

9. _____

10. 2, 6, 36

10. _____

Choose the number that is NOT a composite number.

11. 58, 61, 82, 122

11. _____

Choose the number that is NOT a prime number.

12. 29, 31, 37, 44

12. _____

Replace each \bigcirc with $<$, $>$, or $=$ to make a true statement.

13. $\frac{9}{10} \bigcirc \frac{18}{20}$

13. _____

14. $\frac{3}{7} \bigcirc \frac{1}{2}$

14. _____

Solve.

15. Mrs. Walker is cutting construction paper for an art project.

She has 16 students, and 6 large pieces of construction paper. How much paper will each student receive?

15. _____

16. Charles rode his bike 19 miles each week while training.

Here is his record of the number of miles he rode.

Monday	Tuesday	Wednesday	Thursday	Friday
2.2 mi	?	3.8 mi	?	5.4 mi

Charles rode 1.6 miles more on Thursday than on Tuesday.

Find the number of miles he rode on Tuesday and Thursday.

16. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Find the greatest common factor (GCF) of each set of numbers.

1. 21, 30, 44

1. _____

2. 27, 54, 72

2. _____

Write each fraction in simplest form. If the fraction is already in simplest form, write *simplified*.

3. $\frac{28}{32}$

3. _____

4. $\frac{4}{15}$

4. _____

Solve.

5. Ms. Richards is baking brownies for the bake sale. The recipe requires $\frac{1}{4}$ cup of walnuts. Write $\frac{1}{4}$ as a decimal.

5. _____

6. Jasmyn measured her dog's height. Her dog is $\frac{8}{10}$ of a foot tall. Write $\frac{8}{10}$ as a decimal.

6. _____

Write each fraction as a decimal.

7. $\frac{3}{20}$

7. _____

8. $\frac{2}{4}$

8. _____

Chapter Test, Form 3B *(continued)*

Find the least common multiple (LCM) of each set of numbers.

9. 3, 5, 12

9. _____

10. 6, 16, 24

10. _____

Choose the number that is NOT a composite number.

11. 60, 61, 88, 134

11. _____

Choose the number that is NOT a prime number.

12. 59, 69, 79, 89

12. _____

Replace each \bigcirc with $<$, $>$, or $=$ to make a true statement.

13. $\frac{2}{6} \bigcirc \frac{2}{3}$

13. _____

14. $\frac{3}{8} \bigcirc \frac{1}{4}$

14. _____

Solve.

15. Mr. Green is cutting construction paper for an art project.

He has 24 students, and 12 large pieces of construction paper. How much paper will each student receive?

15. _____

16. Kenyon ran for 8 miles each week while training. Here is his record of the number of miles he ran.

Monday	Tuesday	Wednesday	Thursday	Friday
1.2 mi	?	1.6 mi	?	2 mi

Kenyon ran 0.4 miles more on Thursday than on Tuesday.

Find the number of miles he ran on Tuesday and Thursday.

16. _____

Standardized Test Practice

Read each question. Then fill in the correct answer.

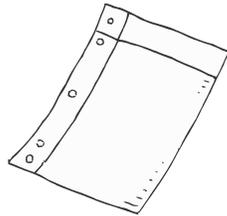
1. Chris has a total of 24 stickers in her collection. She has an equal number of stickers on all 8 pages of her sticker album. How many stickers are on each page?

- (A) 3 stickers
- (B) 4 stickers
- (C) 5 stickers
- (D) 6 stickers



2. Mr. Anderson asks Keith to help pass out papers. There are 420 papers to be passed out to 28 students. If each student receives the same number of papers, how many papers does each student receive?

- (F) 13 papers
- (G) 14 papers
- (H) 15 papers
- (I) 16 papers



3. While traveling on vacation, Isabella notices that the price for unleaded gasoline is \$2.79 and the price for diesel gasoline is \$3.81. How much more is the price of diesel than the price of unleaded?



- (A) \$1.20
- (B) \$1.02
- (C) \$0.20
- (D) \$0.02

4. The table shows the prices for different lunch items.

Lunch Menu	
Item	Price
Sandwich	\$2.39
Slice of pizza	\$2.29
Salad	\$2.09
Chips	\$0.79
Fruit cup	\$1.19
Milk	\$1.25
Juice	\$1.15

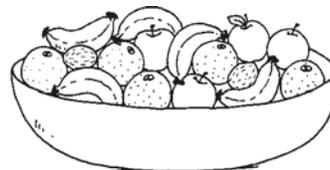
What is the total cost of a sandwich, fruit cup, and juice?

- (F) \$4.63
- (G) \$4.73
- (H) \$4.74
- (I) \$5.73

5. During the week Malia has piano practice for $\frac{3}{4}$ of an hour, soccer practice for $\frac{7}{8}$ of an hour, ballet for $\frac{1}{2}$ of an hour, and painting class for $\frac{1}{4}$ of an hour. Which of these activities does she spend the most time doing during the week?

- (A) ballet
- (B) soccer
- (C) painting
- (D) piano

6. Floyd is preparing a fruit salad. The recipe calls for 4 cups of fruit. Two of the cups of fruit are melon. What fraction of the fruit is melon?

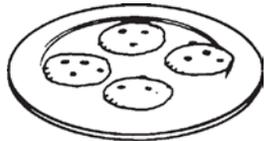


- (F) $\frac{1}{2}$
- (G) $\frac{1}{4}$
- (H) $\frac{3}{4}$
- (I) $\frac{4}{2}$

GO ON ►

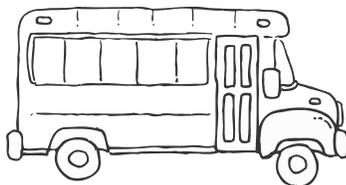
Standardized Test Practice *(continued)*

7. Marion has 15 oatmeal cookies and 20 peanut butter cookies. If Marion gives each friend an equal number of each type of cookie, what is the greatest number of friends with whom he can share his cookies?



- (A) 10 friends (C) 5 friends
(B) 8 friends (D) 2 friends

8. The Line A bus arrives at the bus stop every 20 minutes, and the Line B bus arrives every 15 minutes. Both are at the bus stop right now. In how many minutes will both be at the bus stop again?



- (F) 60 minutes (H) 30 minutes
(G) 45 minutes (I) 20 minutes

9. Hot dogs are sold in packs of 10. Hot dog buns are sold in packs of 8. Elijah is having a party and is serving hot dogs with buns. What is the least number of hot dogs Elijah can make without having any buns or hot dogs leftover?



- (A) 20 (C) 28
(B) 32 (D) 40

10. Faith and Greg are sharing a pizza. Faith ate $\frac{7}{10}$ of the pizza, and Greg ate $\frac{3}{5}$ of the pizza. Write $\frac{7}{10}$ as a decimal.



- (F) 0.07 (H) 0.7
(G) 0.33 (I) 7.0

11. Taylor rode her bike for a longer distance each day while training. Here is her record of the number of miles she rode.

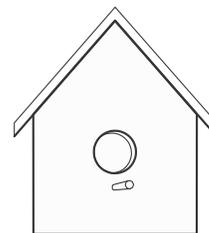
Monday	Tuesday	Wednesday	Thursday	Friday
6.3 mi	7.6 mi	8.9 mi	?	11.5 mi

Based on the pattern, how far did she ride on Thursday?

- (A) 9.2 miles (C) 10 miles
(B) 9.5 miles (D) 10.2 miles

12. Michael is building a birdhouse. He needs a piece of wood that is $\frac{28}{50}$ feet in length.

What is $\frac{28}{50}$ as a decimal?



- (F) 0.56 (H) 0.46
(G) 0.55 (I) 0.24



Extended-Response Test

Demonstrate your knowledge by giving a clear, concise solution to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another piece of paper.

1. a. What is the *greatest common factor*?

- b. Identify the greatest common factor of 12 and 24. Show your work.

2. a. What are *equivalent fractions*? Give an example that includes a model.

- b. What is the difference between a decimal and a fraction?

- c. Is $\frac{7}{5}$ a mixed number, a proper fraction or an improper fraction?

3. Is 25 a multiple of 4? Explain your reasoning.

4. Explain how to write the fraction $\frac{3}{25}$ as a decimal.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

1. What are the first 6 multiples of 4?

2. What are the first 6 multiples of 5?

3. What is the least common multiple of 4 and 5?

4. How did you get your answer?

5. What are the factors of 20?

6. What are the factors of 48?

7. What is the greatest common factor of 20 and 48?

Oral Assessment *(continued)*

Student	Amount Read
Alberto	$\frac{1}{2}$
Alma	$\frac{2}{4}$
Marta	$\frac{3}{4}$
Hugo	$\frac{1}{4}$

8. Mario read $\frac{4}{8}$ of his summer reading book. What other student(s) read the same fraction of his or her book?

9. Who read the most of his or her book?

10. How did you get your answer?

11. What 2 students read the same amount?

12. How did you get your answer?

13. Who read the least amount of his or her book?

14. How did you get your answer?

Am I Ready?

Practice

Multiply.

1. $14 \times 4 =$ _____

2. $39 \times 3 =$ _____

3. $1,540 \times 5 =$ _____

4. $8 \times 1,000 =$ _____

5. $14 \times 100 =$ _____

6. $654 \times 100 =$ _____

7. The circus sold 725 tickets each day for 5 days. How many tickets were sold in all?

Divide.

8. $60 \div 5 =$ _____

9. $56 \div 14 =$ _____

10. $119 \div 17 =$ _____

11. $385 \div 11 =$ _____

12. $800 \div 100 =$ _____

13. $5,600 \div 100 =$ _____

14. Mrs. Bolen bought 288 ounces of juice. How many 8-ounce juice boxes did she buy?

Am I Ready?

Review

Find 256×4 .

$$\begin{array}{r} 256 \\ \times 4 \\ \hline 24 \quad (4 \times 6) \\ 200 \quad (4 \times 50) \\ + 800 \quad (4 \times 200) \\ \hline 1,024 \end{array}$$

Multiply.

1. $48 \times 3 =$ _____

2. $96 \times 6 =$ _____

3. $2,075 \times 4 =$ _____

4. $29 \times 1,000 =$ _____

5. $45 \times 100 =$ _____

6. $624 \times 100 =$ _____

7. $98 \div 7 =$ _____

8. $87 \div 29 =$ _____

9. $128 \div 16 =$ _____

10. $450 \div 30 =$ _____

11. $2,400 \div 100 =$ _____

12. $45,000 \div 100 =$ _____

13. Grover's market bought 55 packs of peppermint gum. The gum came in packs of 8 sticks. How many sticks of gum did the store buy?

14. Each classroom sold 100 raffle tickets for the school carnival. If there are 26 classrooms, how many total raffle tickets did the school sell?

Am I Ready?

Apply

Multiply or divide.

1. Granny's fruit stand sold 325 apples. Each person bought 13 apples. How many people bought apples?

2. Suni drinks 10 glasses of water each day. Each glass contains 8 ounces. How many total ounces of water does Suni drink each day?

3. Butter's Bakery bakes 21 dozen cookies each day. How many cookies do they bake in all?

4. Justin scored a total of 16,650 points on 3 video games. If he scored the same amount on each game, how many points did he score on each game?

5. Melinda took 325 pictures on vacation. She took the same amount of pictures each day. If she was on vacation for 5 days, how many pictures did she take each day?

6. Lillian rides her bike 15 miles each week. How many miles will she ride in 52 weeks?

Diagnostic Test

Multiply.

1. $18 \times 3 =$

2. $27 \times 6 =$

1. _____

2. _____

3. $1,675 \times 4 =$

4. $12 \times 1,000 =$

3. _____

4. _____

5. $87 \times 100 =$

6. $901 \times 100 =$

5. _____

6. _____

7. The carnival sold 245 balloons each day for 7 days.
How many balloons were sold in all?

7. _____

Divide.

8. $75 \div 5 =$

9. $133 \div 19 =$

8. _____

9. _____

10. $135 \div 27 =$

11. $434 \div 14 =$

10. _____

11. _____

12. $1,500 \div 100 =$

13. $45,000 \div 100 =$

12. _____

13. _____

14. Mr. Callendar bought 245 pencils. The pencils came in packs of 5. How many packs of pencils did he buy?

14. _____

Pretest

Add. Write in simplest form.

1. $\frac{2}{5} + \frac{2}{5} =$

1. _____

2. $3\frac{8}{9} + \frac{3}{9} =$

2. _____

3. $4\frac{5}{6} + 6\frac{2}{3} =$

3. _____

Solve.

4. Frank is putting up wallpaper in his bedroom. His bedroom measures $1\frac{1}{8}$ feet long and $9\frac{3}{4}$ feet wide. What is the perimeter of Frank's bedroom?

4. _____

5. Yuli has a piece of wood that measures $4\frac{1}{5}$ feet. If each shelf she is making is $1\frac{4}{5}$ feet long, will she have enough for 3 shelves?

5. _____

Estimate by rounding each mixed number to the nearest whole number.

6. $4\frac{4}{5} + 1\frac{4}{5} =$

6. _____

Subtract. Write in simplest form.

7. $17\frac{11}{16} - 9\frac{5}{6} =$

7. _____

8. $34\frac{7}{9} - 21\frac{2}{9} =$

8. _____

9. $3\frac{1}{4} - 2\frac{2}{4} =$

9. _____

10. $17 - 5\frac{3}{4} =$

10. _____

Check My Progress (*Lessons 1 through 5*)**Round each fraction to 0, $\frac{1}{2}$, or 1.**

1. $\frac{7}{9}$

1. _____

2. $\frac{2}{10}$

2. _____

3. $\frac{3}{8}$

3. _____

4. $\frac{1}{6}$

4. _____

Add. Write the sum in simplest form.

5. $\frac{4}{7} + \frac{2}{7} =$

5. _____

6. $\frac{1}{9} + \frac{7}{9} =$

6. _____

7. $\frac{1}{3} + \frac{2}{9} =$

7. _____

8. $\frac{2}{3} + \frac{1}{4} =$

8. _____

9. $\frac{3}{8} + \frac{3}{4} =$

9. _____

Subtract. Write the difference in simplest form.

10. $\frac{4}{7} - \frac{3}{7} =$

10. _____

11. $\frac{12}{16} - \frac{8}{16} =$

11. _____

12. Find the difference between *six ninths and four ninths*.
Write your answer in words.

12. _____

Check My Progress (Lessons 6 through 9)**Subtract. Write the difference in simplest form.**

1. $\frac{3}{4} - \frac{1}{3} =$

1. _____

2. $\frac{8}{9} - \frac{2}{3} =$

2. _____

3. $\frac{7}{10} - \frac{1}{5} =$

3. _____

Estimate by rounding each mixed number to the nearest whole number.

4. $4\frac{3}{5} + 1\frac{1}{5} =$

4. _____

5. $2\frac{1}{9} + 6\frac{7}{9} =$

5. _____

6. $\frac{10}{12} + \frac{11}{12} =$

6. _____

Solve. Determine which answer is reasonable.

7. Andy has a stamp collection with 343 stamps. Of these, 296 are from Germany. Is 40, 50, or 60 a more reasonable estimate for how many stamps are from other countries?

7. _____

8. Mrs. Dean harvested $1\frac{1}{4}$ pounds of green peppers, $2\frac{1}{4}$ pounds of yellow peppers, and $5\frac{1}{4}$ pounds of red peppers from her garden. Is 8 pounds, 9 pounds, or 10 pounds a more reasonable estimate for how many pounds of peppers she harvested altogether?

8. _____

9. A marker costs \$0.99. A pad of paper costs \$1.25 more than the marker. Which is a more reasonable estimate for the total cost of both items: \$2 or \$3?

9. _____

Vocabulary Test

Match each description to its vocabulary term. Write your answers on the lines provided.

- | | |
|--|---------------------------|
| A. a number formed by a whole number and a fraction | 1. denominator _____ |
| B. not an exact answer | 2. estimate _____ |
| C. changing a number to its closest whole number in order to make multiplication easier | 3. like fractions _____ |
| D. the form used when the greatest common factor of the numerator and the denominator is 1 | 4. mixed number _____ |
| E. fractions with the same denominators | 5. numerator _____ |
| F. fractions with different denominators | 6. rounding _____ |
| G. the top number in a fraction | 7. simplest form _____ |
| H. the bottom number in a fraction | 8. unlike fractions _____ |

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression? Write each sum in simplest form.

1. $\frac{3}{6} + \frac{1}{6} =$

A. $\frac{1}{3}$

B. $\frac{2}{3}$

C. $\frac{4}{6}$

D. $\frac{3}{3}$

1. _____

2. $\frac{2}{9} + \frac{1}{3} =$

F. $\frac{5}{9}$

G. $\frac{2}{3}$

H. $\frac{7}{9}$

I. $\frac{8}{9}$

2. _____

3. $1\frac{2}{3} + 4\frac{2}{3} =$

A. $5\frac{1}{3}$

B. $5\frac{2}{3}$

C. $6\frac{1}{3}$

D. $6\frac{2}{3}$

3. _____

4. $11\frac{7}{8} + 7\frac{1}{4} =$

F. $18\frac{1}{8}$

G. $18\frac{7}{8}$

H. $19\frac{1}{8}$

I. $19\frac{1}{4}$

4. _____

Which is the best estimate of each expression?

5. $3\frac{3}{5} + 1\frac{1}{5} =$

A. 4

B. 5

C. 6

D. 7

5. _____

6. $2\frac{5}{6} + 9\frac{2}{12} =$

F. 11

G. 12

H. 13

I. 14

6. _____

Chapter Test, Form 1A (continued)

What is the value of each expression? Write each difference in simplest form.

7. $\frac{7}{8} - \frac{1}{2} =$

A. $\frac{1}{8}$

B. $\frac{2}{8}$

C. $\frac{1}{4}$

D. $\frac{3}{8}$

7. _____

8. $\frac{7}{9} - \frac{2}{9} =$

F. $\frac{3}{9}$

G. $\frac{4}{9}$

H. $\frac{5}{9}$

I. $\frac{9}{9}$

8. _____

9. $8\frac{3}{8} - 3\frac{1}{8} =$

A. $5\frac{1}{8}$

B. $5\frac{1}{4}$

C. $6\frac{1}{4}$

D. $6\frac{3}{4}$

9. _____

10. $12\frac{9}{10} - 4\frac{1}{5} =$

F. $8\frac{7}{10}$

G. $8\frac{1}{5}$

H. $7\frac{2}{10}$

I. $7\frac{1}{10}$

10. _____

11. $5\frac{2}{5} - 3\frac{1}{3} =$

A. $1\frac{3}{5}$

B. $1\frac{4}{5}$

C. $2\frac{1}{15}$

D. $2\frac{3}{5}$

11. _____

12. $10\frac{5}{8} - 6\frac{7}{8} =$

F. $3\frac{1}{4}$

G. $3\frac{1}{2}$

H. $3\frac{3}{4}$

I. 4

12. _____

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression? Write each sum in simplest form.

1. $\frac{1}{6} + \frac{2}{6} =$

A. $\frac{1}{3}$

C. $\frac{2}{3}$

B. $\frac{1}{2}$

D. $\frac{5}{6}$

1. _____

2. $\frac{1}{3} + \frac{4}{9} =$

F. $\frac{5}{9}$

H. $\frac{7}{9}$

G. $\frac{2}{3}$

I. $\frac{8}{9}$

2. _____

3. $2\frac{1}{3} + 4\frac{1}{3} =$

A. $5\frac{1}{3}$

C. $6\frac{1}{3}$

B. $5\frac{2}{3}$

D. $6\frac{2}{3}$

3. _____

4. $10\frac{1}{2} + 8\frac{3}{4} =$

F. $18\frac{1}{8}$

H. $19\frac{1}{8}$

G. $18\frac{7}{8}$

I. $19\frac{1}{4}$

4. _____

Which is the best estimate of each expression?

5. $4\frac{1}{5} + 1\frac{1}{5} =$

A. 4

C. 6

B. 5

D. 7

5. _____

6. $1\frac{1}{6} + 10\frac{1}{6} =$

F. 11

H. 13

G. 12

I. 14

6. _____

Chapter Test, Form 1B (continued)

What is the value of each expression? Write each difference in simplest form.

7. $\frac{7}{8} - \frac{3}{8} =$

A. $\frac{1}{8}$

B. $\frac{2}{8}$

C. $\frac{3}{8}$

D. $\frac{1}{2}$

7. _____

8. $\frac{2}{3} - \frac{2}{9} =$

F. $\frac{3}{9}$

G. $\frac{4}{9}$

H. $\frac{5}{9}$

I. $\frac{9}{9}$

8. _____

9. $6\frac{3}{8} - 2\frac{2}{16} =$

A. $4\frac{1}{4}$

B. $5\frac{1}{4}$

C. $6\frac{1}{4}$

D. $6\frac{3}{4}$

9. _____

10. $12\frac{3}{5} - 3\frac{7}{10} =$

F. $7\frac{1}{10}$

G. $8\frac{1}{10}$

H. $8\frac{9}{10}$

I. $9\frac{2}{10}$

10. _____

11. $5\frac{1}{5} - 2\frac{4}{5} =$

A. $1\frac{3}{5}$

B. $1\frac{4}{5}$

C. $2\frac{2}{5}$

D. $2\frac{3}{5}$

11. _____

12. $8\frac{1}{2} - 6\frac{7}{8} =$

F. $1\frac{5}{8}$

G. $2\frac{6}{8}$

H. $3\frac{3}{4}$

I. 4

12. _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression? Write each sum in simplest form.

1. $\frac{1}{9} + \frac{1}{6} =$

A. $\frac{5}{18}$

B. $\frac{2}{9}$

C. $\frac{1}{6}$

D. $\frac{1}{18}$

1. _____

2. $\frac{4}{9} + \frac{2}{9} =$

F. $\frac{5}{9}$

G. $\frac{2}{3}$

H. $\frac{7}{9}$

I. $\frac{8}{9}$

2. _____

3. $\frac{5}{9} - \frac{1}{3} =$

A. $\frac{2}{9}$

B. $\frac{3}{9}$

C. $\frac{4}{9}$

D. $\frac{9}{9}$

3. _____

4. $\frac{7}{8} - \frac{5}{8} =$

F. $\frac{1}{8}$

G. $\frac{2}{8}$

H. $\frac{1}{4}$

I. $\frac{3}{8}$

4. _____

Which is the best estimate of each expression?

5. $3\frac{1}{6} + 5\frac{1}{6} =$

A. 8

B. 10

C. 11

D. 14

5. _____

6. $3\frac{1}{5} + 6\frac{1}{5} =$

F. 4

G. 5

H. 9

I. 10

6. _____

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

7. What is the value of $10\frac{3}{8} + 2\frac{1}{8}$? 7. _____

8. What is the value of $12\frac{1}{5} - 3\frac{9}{10}$? 8. _____

Add or subtract. Write in simplest form.

9. $6\frac{1}{5} - 3\frac{4}{5} =$ 9. _____

10. $5\frac{1}{8} - 2\frac{7}{8} =$ 10. _____

11. $8\frac{3}{4} + 5\frac{3}{4} =$ 11. _____

Solve.

12. A store sells $14\frac{2}{3}$ pounds of carrots one day. The next day the store sells $2\frac{1}{3}$ pounds of carrots. How many pounds of carrots did the store sell? 12. _____

13. Ian read for $\frac{1}{4}$ hour today. He read for $\frac{2}{3}$ hour yesterday. How much longer did Ian spend reading yesterday than today? 13. _____

14. Rey feeds his dog $\frac{2}{5}$ of a can of dog food in the morning and $\frac{4}{5}$ of a can in the evening. How many cans of dog food will Rey need in order to feed his dog for five days? 14. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression? Write each sum in simplest form.

1. $\frac{3}{6} + \frac{1}{8} =$

A. $\frac{1}{8}$

C. $\frac{13}{24}$

B. $\frac{11}{24}$

D. $\frac{5}{8}$

1. _____

2. $\frac{1}{9} + \frac{4}{9} =$

F. $\frac{5}{9}$

H. $\frac{7}{9}$

G. $\frac{2}{3}$

I. $\frac{8}{9}$

2. _____

3. $\frac{8}{9} - \frac{1}{3} =$

A. $\frac{3}{9}$

C. $\frac{5}{9}$

B. $\frac{4}{9}$

D. $\frac{9}{9}$

3. _____

4. $\frac{6}{8} - \frac{3}{8} =$

F. $\frac{1}{8}$

H. $\frac{3}{5}$

G. $\frac{2}{8}$

I. $\frac{1}{2}$

4. _____

Which is the best estimate of each expression?

5. $1\frac{5}{6} + 10\frac{1}{6} =$

A. 11

C. 13

B. 12

D. 14

5. _____

6. $3\frac{2}{5} + 1\frac{1}{5} =$

F. 4

H. 6

G. 5

I. 7

6. _____

Chapter Test, Form 2B *(continued)*

Read each question carefully. Write your answer on the line provided.

7. What is the value of $6\frac{1}{8} - 2\frac{3}{8}$? 7. _____

8. What is the value of $2\frac{3}{5} + 1\frac{7}{10}$? 8. _____

Add or subtract. Write in simplest form.

9. $4\frac{1}{5} - 1\frac{3}{5} =$ 9. _____

10. $4\frac{3}{8} + 2\frac{1}{4} =$ 10. _____

11. $8\frac{1}{4} - 3\frac{3}{4} =$ 11. _____

Solve.

12. A store sells $\frac{3}{5}$ pounds of carrots and $\frac{1}{3}$ pound of asparagus. How many more pounds of carrots did the store sell? 12. _____

13. Annie spent $3\frac{1}{3}$ hours reading a novel and $1\frac{1}{3}$ hours reading poetry. How many hours did Annie spend reading? 13. _____

14. Rafi feeds his cat $\frac{5}{6}$ of a can of cat food in the morning and $\frac{2}{3}$ of a can in the evening. How many cans of cat food will Rafi need in order to feed his cat for six days? 14. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Add. Write in simplest form.

1. $\frac{2}{6} + \frac{1}{4} =$

1. _____

2. $\frac{3}{9} + \frac{2}{9} =$

2. _____

Subtract. Write in simplest form.

3. $\frac{4}{9} - \frac{2}{9} =$

3. _____

4. $\frac{7}{8} - \frac{1}{2} =$

4. _____

Add or subtract. Write in simplest form.

5. $3\frac{5}{6} + 5\frac{10}{12} =$

5. _____

6. $10\frac{1}{8} + 2\frac{1}{4} =$

6. _____

7. $7\frac{3}{10} - 3\frac{9}{10} =$

7. _____

8. $4\frac{2}{5} + 3\frac{4}{5} =$

8. _____

9. $7\frac{1}{4} - 2\frac{7}{8} =$

9. _____

10. $9\frac{3}{4} - 6\frac{9}{12} =$

10. _____

Chapter Test, Form 3A *(continued)***Solve.**

11. A store sells $10\frac{1}{3}$ pounds of potatoes one day. The next day the store sells $2\frac{1}{3}$ pounds of potatoes. How many pounds of potatoes did the store sell in all? 11. _____

12. Tammy read for $\frac{1}{3}$ hour today. She read for $\frac{1}{3}$ hour yesterday. How many hours did Tammy read in all? 12. _____

13. Rhiannon is making a frame for a picture she drew. The length of the picture is $12\frac{1}{2}$ inches, and the width of the picture is $8\frac{3}{5}$ inches. How much longer is the picture than it is wide? 13. _____

14. Stephen and Jon are calculating their combined height. Stephen is $5\frac{5}{6}$ feet tall, and Jon is $5\frac{7}{12}$ feet tall. What is Stephen and Jon's combined height? 14. _____

15. Charlie is cutting a $10\frac{3}{8}$ -foot piece of wood to make shelves for his bedroom. Does Charlie have enough wood to make four shelves measuring $2\frac{5}{8}$ feet each? 15. _____

16. Dionne is finding the dimensions of her closet door. The closet door is $6\frac{2}{5}$ feet tall and $2\frac{7}{8}$ feet wide. What is the best estimate for how much taller is the closet door than it is wide? 16. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Add. Write in simplest form.

1. $\frac{5}{6} + \frac{1}{9} =$

1. _____

2. $\frac{3}{9} + \frac{4}{9} =$

2. _____

Subtract. Write in simplest form.

3. $\frac{8}{12} - \frac{3}{12} =$

3. _____

4. $\frac{7}{8} - \frac{1}{3} =$

4. _____

Add or subtract. Write in simplest form.

5. $1\frac{5}{6} + 10\frac{1}{6} =$

5. _____

6. $6\frac{2}{8} - 2\frac{7}{8} =$

6. _____

7. $12\frac{3}{5} + 1\frac{7}{10} =$

7. _____

8. $14\frac{1}{15} - 11\frac{4}{5} =$

8. _____

9. $4\frac{1}{6} - 2\frac{7}{18} =$

9. _____

10. $8\frac{1}{14} + 3\frac{3}{14} =$

10. _____

Chapter Test, Form 3B *(continued)***Solve.**

11. A store sells $15\frac{2}{3}$ pounds of carrots, $12\frac{1}{3}$ pounds of asparagus, and $3\frac{2}{3}$ pounds of cabbage. How many pounds did the store sell altogether?

11. _____

12. Estrella spent the weekend reading. On Friday night, she read for $\frac{1}{3}$ hour. On Saturday, she read for $\frac{1}{6}$ hour, and on Sunday she read for $\frac{1}{4}$ hour. How many hours did Estrella spend reading?

12. _____

13. Tina is making a frame for a picture she drew. The length of the picture is $11\frac{1}{9}$ inches, and the width of the picture is $7\frac{1}{4}$ inches. How much longer is the picture than it is wide?

13. _____

14. Jay and David are calculating their combined height. Jay is $5\frac{3}{4}$ feet tall, and David is $6\frac{1}{8}$ feet tall. What is Jay and David's combined height?

14. _____

15. Dulé is cutting a $12\frac{4}{5}$ -foot piece of wood to make shelves for his bedroom. Does Dulé have enough wood to make four shelves measuring $2\frac{7}{8}$ feet each?

15. _____

16. Elizabeth is finding the dimensions of her bedroom door. The bedroom door is $6\frac{3}{8}$ feet tall and $2\frac{5}{8}$ feet wide. What is the best estimate for how much taller is the bedroom door than it is wide?

16. _____

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. There are 980 students enrolled at Milltown Middle School. There are 35 different classrooms in the school. If each classroom has the same number of students, how many students are in each classroom?



- (A) 25 students (C) 30 students
(B) 28 students (D) 33 students

3. How many teaspoons of baking soda and ground cinnamon are used altogether?

- (A) 2 tsp (C) $2\frac{1}{2}$ tsp
(B) $2\frac{1}{4}$ tsp (D) $2\frac{3}{4}$ tsp

4. Fina bought a DVD player for \$58.97 and a set of DVDs for \$24.98. How much did Fina spend in all?

- (F) \$84.95 (H) \$73.95
(G) \$83.95 (I) \$83.85

Use the table to answer Exercises 2 and 3.

Dessert Recipe	
Item	Quantity (teaspoons)
Baking Soda	$1\frac{1}{4}$
Salt	1
Ground Cinnamon	$1\frac{1}{2}$
Ground Mace	$\frac{1}{2}$
Ground Nutmeg	$\frac{1}{8}$
Ground Cloves	$\frac{1}{8}$
Vanilla	$1\frac{1}{8}$

2. How many teaspoons of ground nutmeg and ground cloves are used altogether?

- (F) $\frac{1}{7}$ tsp (H) $\frac{1}{3}$ tsp
(G) $\frac{1}{4}$ tsp (I) $\frac{1}{2}$ tsp

5. On Tuesday it rained $\frac{3}{4}$ of an inch. On Wednesday it rained $\frac{1}{4}$ of an inch. How much more rain fell on Tuesday than on Wednesday?

- (A) 1 inch
(B) $\frac{1}{2}$ inch
(C) $\frac{1}{4}$ inch
(D) $\frac{3}{4}$ inch



6. Lucas took his bike to a local park to ride on some bike trails. Trail A is $6\frac{3}{4}$ miles long. Trail B is $8\frac{1}{2}$ miles long. How many miles longer is Trail B than Trail A.

- (F) 15 miles
(G) $1\frac{1}{2}$ miles
(H) $\frac{3}{4}$ miles
(I) 1 mile



GO ON ►

Standardized Test Practice *(continued)*

7. During the week Graham has guitar practice for $\frac{3}{4}$ of an hour, baseball practice for $\frac{7}{8}$ of an hour, and karate for $\frac{1}{4}$ of an hour. How much time does Graham spend altogether at guitar practice, baseball practice, and karate during the week?

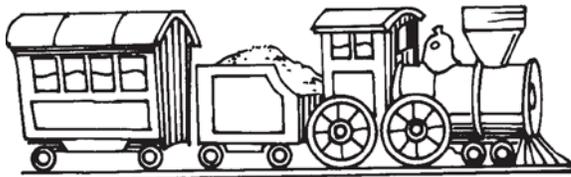
- (A) 1 hour
- (B) $1\frac{7}{8}$ hours
- (C) $1\frac{1}{8}$ hours
- (D) $1\frac{4}{8}$ hours

8. Benito has 42 orange juice boxes and 36 grape juice boxes. If Benito gives each friend an equal number of each type of juice box, what is the greatest number of friends with whom he can share his juice boxes?

- (F) 7 friends
- (G) 6 friends
- (H) 5 friends
- (I) 4 friends

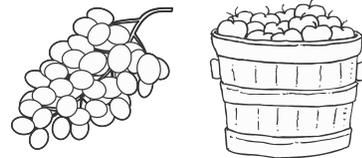


9. Train A arrives at the train station every 30 minutes, and Train B arrives every 40 minutes. Both are at the train station right now. In how many minutes will both be at the train station again?



- (A) 120 minutes
- (B) 90 minutes
- (C) 60 minutes
- (D) 30 minutes

10. Sunil is preparing a fruit medley for an upcoming party. The recipe requires $3\frac{2}{3}$ cups of grapes and $4\frac{1}{4}$ cups of apples. How many more cups of apples are in the fruit medley than grapes?



- (F) 2 cups
- (G) $1\frac{1}{4}$ cups
- (H) $\frac{3}{4}$ cup
- (I) $\frac{7}{12}$ cup

11. Nami recorded the height of her sunflower each week. The table below shows her record.

Week 1	Week 2	Week 3	Week 4	Week 5
4.3 cm	5.6 cm	6.9 cm	8.2 cm	

If the pattern continues, how tall will her sunflower be in Week 5?

- (A) 9.2 cm
- (B) 9.5 cm
- (C) 10 cm
- (D) 10.2 cm

12. Four quarters in a football game lasted $1\frac{1}{2}$ hours. The game went into overtime and the team played for another $\frac{1}{4}$ hour. How long did the football game and overtime last altogether?

- (F) 2 hours
- (G) $1\frac{3}{4}$ hours
- (H) $1\frac{1}{2}$ hours
- (I) $1\frac{1}{4}$ hours



Extended-Response Test

Demonstrate your knowledge by giving a clear, concise solution to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem.

If necessary, record your answer on another piece of paper.

1. Explain in your own words what a fraction is. Draw a picture of a fraction. Explain your drawing.

2. There are 18 apples on the tree in the Donaldson's front yard. Namid climbed the tree and ate 3 of the apples. Dawn shook the tree, and 2 more apples fell. What fraction of the apples are still on the tree?

- a. Explain in your own words what a numerator is. What is the numerator of the fraction of the apples that Namid ate?

- b. Explain in your own words what a denominator is. What is the denominator of the fraction of the apples that Namid ate?

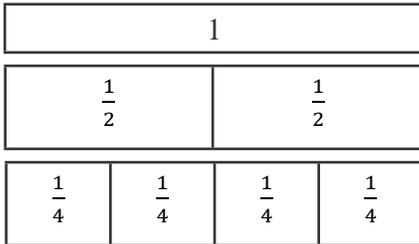
- c. What is the fraction that represents the apples that are no longer in the tree?

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Use construction paper to cut out the following labeled shapes:



Read each question aloud to the student. Then write the student's answers on the lines below the questions.

1. How are these shapes labeled?

2. Line these shapes up against each other. Are all the shapes the same length?

3. Look at the shape labeled 1 and the shape labeled $\frac{1}{2}$ and $\frac{1}{2}$. Put them next to each other. What do you notice?

4. Look at the shape labeled $\frac{1}{2}$ and $\frac{1}{2}$. What does $\frac{1}{2}$ and $\frac{1}{2}$ equal?

5. Hold the shape labeled 1 next to the shape with labeled $\frac{1}{2}$ and $\frac{1}{2}$. Is your sentence correct? How do you know?

Oral Assessment *(continued)*

6. Now let's look at the shape labeled $\frac{1}{4}$. How is it different from the first two shapes?

7. Let's look at the shape with sections labeled $\frac{1}{4}$ next to the shape labeled 1. Are these shapes the same length?

8. How many $\frac{1}{4}$ sections are equal to the shape labeled 1?

9. How do you know?

10. Tell a number sentence about the shape with sections labeled $\frac{1}{4}$.

11. Look at the shape labeled $\frac{1}{2} + \frac{1}{2}$ next to the shape labeled $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$. Tell how these shapes are related.

12. How do you know?

Am I Ready?

Practice

Estimate by rounding each mixed number to the nearest whole number.

1. $8\frac{4}{5} + 4\frac{9}{10} =$

about _____

2. $35\frac{6}{7} + 30\frac{1}{5} =$

about _____

3. $12\frac{1}{3} - 2\frac{1}{6} =$

about _____

4. Stan practiced his trumpet for $1\frac{1}{6}$ hours. Then he did his homework for $2\frac{1}{4}$ hours. About how much time did he spend on the two activities?

Estimate. Use rounding or compatible numbers.

5. $496 \div 11 =$

about _____

6. $102 \times 9 =$

about _____

7. $323 \div 82 =$

about _____

8. Mr. Thomas has 238 bottles of water for the runners in the marathon. He wants to put these into boxes that hold 12 bottles each. About how many boxes will he need?

Add or subtract. Write in simplest form.

9. $\frac{2}{3} + \frac{1}{3} =$ _____

10. $\frac{2}{5} - \frac{1}{5} =$ _____

11. $\frac{2}{9} + \frac{2}{3} =$ _____

12. $\frac{6}{7} - \frac{3}{4} =$ _____

13. $\frac{3}{4} + \frac{2}{3} =$ _____

14. $\frac{2}{3} - \frac{1}{3} =$ _____

Am I Ready?

Review

To estimate the answer to a problem, use rounding or compatible numbers.

Rounding	Compatible Numbers
<p>Find . $3\frac{7}{8} - 1\frac{1}{4}$.</p> <p>$3\frac{7}{8}$ is about 4.</p> <p>$1\frac{1}{4}$ is about 1.</p> $\begin{array}{r} 3\frac{7}{8} - 1\frac{1}{4} \\ \downarrow \quad \downarrow \\ 4 - 1 = 3 \end{array}$ <p>So, $3\frac{7}{8} - 1\frac{1}{4}$ is about 3.</p>	<p>Find $331 \div 43$.</p> <p>320 and 40 are compatible numbers since $32 \div 4 = 8$</p> <p>$331 \div 43 \approx 320 \div 40$</p> <p style="text-align: center;">≈ 8</p> <p>So, $331 \div 43$ is about 8.</p>

Estimate. Use rounding or compatible numbers.

1. $633 \div 94 =$

about _____

2. $6\frac{1}{6} + 2\frac{7}{8} =$

about _____

3. $48 \times 11 =$

about _____

4. $12\frac{1}{5} - 8\frac{1}{4} =$

about _____

5. $601 \div 23 =$

about _____

6. $5\frac{1}{8} + 1\frac{8}{9} =$

about _____

7. $89 \times 5 =$

about _____

8. $8\frac{1}{3} - 2\frac{2}{3} =$

about _____

9. $163 \div 44 =$

about _____

10. $8\frac{5}{6} + 2\frac{1}{8} =$

about _____

11. $48 \times 6 =$

about _____

12. $1\frac{5}{6} - 1\frac{1}{9} =$

about _____

Am I Ready?

Apply

Solve. Use rounding or compatible numbers.

1. The Apple Hill Orchard is selling bags of apples. Each bag contains 20 apples. About how many bags will be needed for 803 apples?

2. Jeremy sells bags of dog biscuits. Each bag costs \$0.95. He wants to sell enough biscuits to make \$100. About how many bags of dog biscuits does he need to sell?

3. Maureen spent $\frac{3}{4}$ hour at the music store in the mall, $\frac{1}{6}$ hour at the jewelry shop, and $1\frac{1}{8}$ hours with friends at the food court. About how much time did she spend in all?

4. Steven has \$87 in his savings account. He wants to buy a new bicycle for \$152. About how much more money does he need in order to be able to buy the bicycle?

5. Joyce and her family are driving 178 miles to visit relatives. The speed limit on the highway is 65 miles per hour. About how many hours will it take them to get there?

6. Mr. Edwards has a farm that is 348 acres. He decides to break it into 5 equal sections and plant a different crop in each section. About how many acres are in each section?

7. In the donut shop, Tony is making 8 trays of chocolate-covered donuts. There are 24 donuts on each tray. If he has made 3 trays, about how many more donuts does he have to make?

8. Sarah is volunteering at a fundraising event for a local charity. She packs snack bags for the participants. In 1 hour, she can pack 24 bags. About how many can she pack in 3 hours?

Diagnostic Test

Estimate by rounding each mixed number to the nearest whole number.

1. $4\frac{2}{3} + 3\frac{1}{5} =$ 1. _____

2. $6\frac{2}{5} - 3\frac{3}{8} =$ 2. _____

3. $18\frac{4}{5} - 11\frac{1}{6} =$ 3. _____

4. Bruce mixes $3\frac{1}{4}$ liters of fruit juice with $4\frac{4}{5}$ liters of lemon-lime soda. About how much liquid will the bowl need to hold in order for Bruce to mix the two liquids? 4. _____

Estimate. Use rounding or compatible numbers.

5. $121 \times 19 =$ 5. _____

6. $637 \div 7 =$ 6. _____

7. $117 \div 6 =$ 7. _____

8. Dinah sold 9 cases of cookies for a fundraiser. Each case holds 23 boxes of cookies. About how many boxes of cookies did Dinah sell? 8. _____

Add or subtract. Write in simplest form.

9. $\frac{1}{5} + \frac{2}{5} =$ 9. _____

10. $\frac{3}{8} + \frac{7}{8} =$ 10. _____

11. $\frac{3}{5} + \frac{1}{3} =$ 11. _____

12. $\frac{5}{8} - \frac{1}{8} =$ 12. _____

13. $\frac{7}{9} - \frac{2}{3} =$ 13. _____

14. Hal spent $\frac{3}{4}$ hour reading on Monday and $\frac{5}{6}$ hour on Wednesday. How long did Hal spend reading in all? 14. _____

Pretest

Multiply. Write in simplest form.

1. $5 \times \frac{3}{4} =$

1. _____

2. $8 \times \frac{1}{6} =$

2. _____

3. $\frac{2}{5} \times \frac{3}{8} =$

3. _____

4. $\frac{1}{5} \times \frac{5}{8} =$

4. _____

5. $\frac{1}{4} \times \frac{1}{3} =$

5. _____

6. $\frac{1}{9} \times \frac{3}{8} =$

6. _____

7. $2\frac{2}{5} \times \frac{5}{9} =$

7. _____

8. $3\frac{1}{8} \times \frac{4}{5} =$

8. _____

Use the model to find each quotient.

9. $5 \div \frac{1}{3} =$



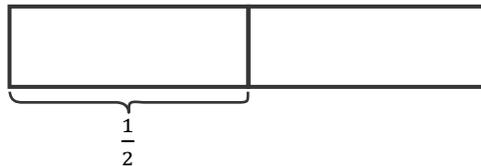
9. _____

10. $4 \div \frac{1}{6} =$



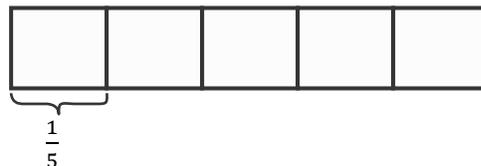
10. _____

11. $\frac{1}{2} \div 6 =$



11. _____

12. $\frac{1}{2} \div 2 =$



12. _____

Check My Progress *(Lessons 1 through 4)***Estimate each product. Draw a bar diagram if necessary.**

1. $\frac{1}{4} \times 19 =$

1. _____

2. $\frac{1}{6} \times 55 =$

2. _____

3. $13 \times \frac{1}{2} =$

3. _____

4. $16 \times \frac{2}{5} =$

4. _____

5. $2\frac{4}{5} \times 3\frac{1}{7} =$

5. _____

Multiply. Write in simplest form.

6. $\frac{1}{2} \times 24 =$

6. _____

7. $\frac{2}{13} \times 26 =$

7. _____

8. $\frac{2}{5} \times 17 =$

8. _____

9. $18 \times \frac{1}{4} =$

9. _____

10. $\frac{1}{15} \times 18 =$

10. _____

Check My Progress (Lessons 5 through 8)

Multiply. Write in simplest form.

1. $\frac{1}{4} \times \frac{1}{9} =$

1. _____

2. $\frac{1}{6} \times \frac{5}{8} =$

2. _____

3. $\frac{3}{12} \times \frac{1}{2} =$

3. _____

4. $\frac{1}{6} \times \frac{2}{5} =$

4. _____

5. $\frac{3}{9} \times \frac{1}{7} =$

5. _____

6. $\frac{1}{2} \times 2\frac{1}{4} =$

6. _____

7. $\frac{2}{13} \times 26\frac{2}{5} =$

7. _____

8. $\frac{2}{5} \times 17\frac{3}{4} =$

8. _____

9. $18\frac{3}{8} \times \frac{1}{4} =$

9. _____

10. $\frac{1}{12} \times 18\frac{4}{9} =$

10. _____

11. $4\frac{3}{8} \times 2\frac{1}{9} =$

11. _____

12. $6\frac{2}{3} \times 2\frac{5}{12} =$

12. _____

Vocabulary Test

Read each clue. Fill the corresponding section of the crossword puzzle to answer each clue. Use the words in the word bank.

compatible numbers	fraction	mixed number	scaling
denominator	improper fraction	numerator	simplest form

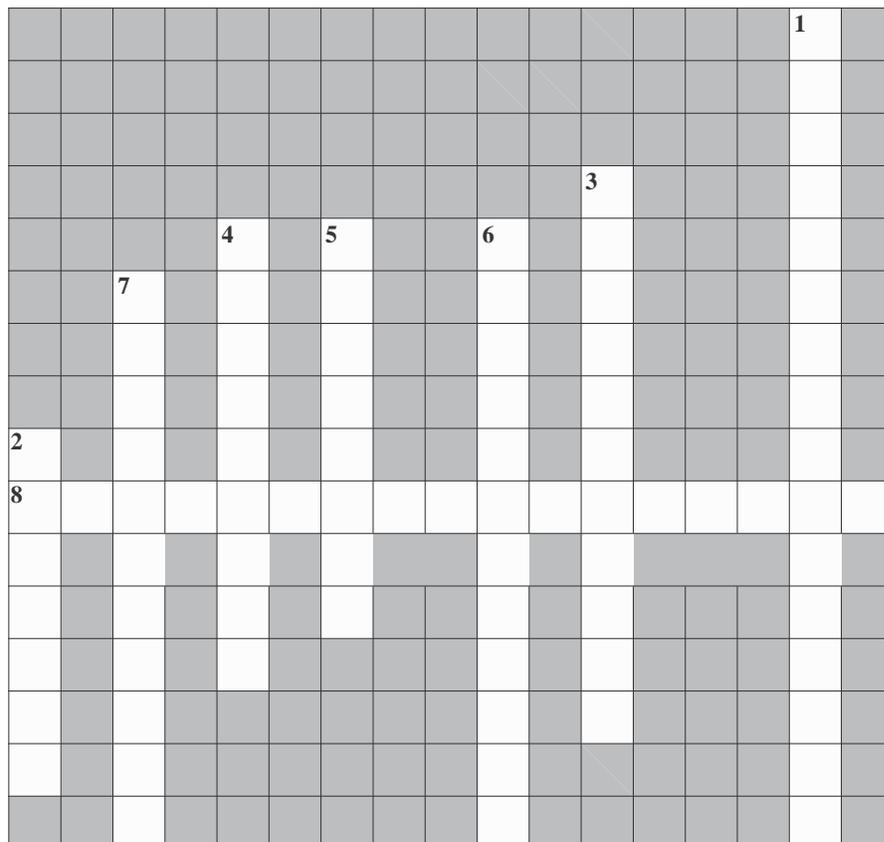
Across

8. These numbers can be used to estimate products and quotients of fractions.

Down

1. A fraction with a numerator greater than or equal to the denominator.
2. Resizing a number when it is multiplied by a fraction that is greater than or less than 1.

3. A number that has a whole number and a fraction.
4. The top number of a fraction.
5. A number that represents part of a whole or part of a set.
6. A fraction in which the GCF of the numerator and the denominator is 1.
7. Represents the number of parts in the whole.



Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

Multiply.

1. $4 \times \frac{3}{5} =$

A. $1\frac{2}{5}$

C. $2\frac{2}{5}$

B. $1\frac{2}{3}$

D. $2\frac{2}{3}$

1. _____

2. $\frac{2}{7} \times 9 =$

F. $2\frac{2}{9}$

H. $3\frac{1}{7}$

G. $2\frac{4}{7}$

I. $9\frac{2}{7}$

2. _____

3. $5 \times \frac{2}{3} =$

A. $3\frac{1}{3}$

C. $6\frac{1}{3}$

B. $3\frac{2}{3}$

D. $6\frac{2}{3}$

3. _____

4. $\frac{3}{4} \times \frac{1}{3} =$

F. $\frac{1}{4}$

H. $\frac{3}{5}$

G. $\frac{1}{3}$

I. $1\frac{1}{12}$

4. _____

5. $3\frac{3}{5} \times 2\frac{2}{9} =$

A. 5

C. 7

B. 6

D. 8

5. _____

6. $5\frac{5}{6} \times 4\frac{1}{2} =$

F. $20\frac{5}{6}$

H. $25\frac{1}{2}$

G. $24\frac{1}{6}$

I. $26\frac{1}{4}$

6. _____

Chapter Test, Form 1A *(continued)*

Read each question carefully. Write the letter for your answer on the line provided.

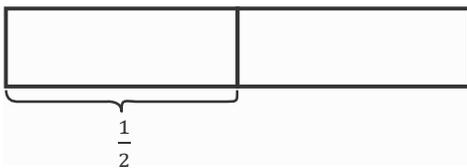
Use the models to divide.

7. $3 \div \frac{1}{4} =$



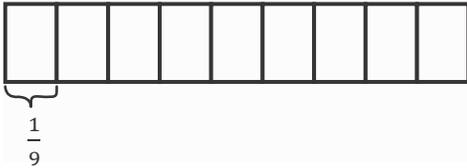
- A. 12 B. 14 C. 16 D. 18 7. _____

8. $\frac{1}{2} \div 3 =$



- F. $\frac{1}{2}$ G. $\frac{1}{4}$ H. $\frac{1}{6}$ I. $\frac{1}{8}$ 8. _____

9. $\frac{1}{9} \div 2 =$



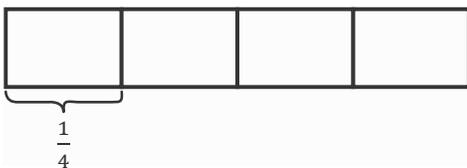
- A. $\frac{1}{18}$ B. $\frac{1}{10}$ C. $\frac{1}{8}$ D. $\frac{1}{7}$ 9. _____

10. Mandy has 7 pounds of raisins to divide equally into $\frac{1}{2}$ pound bags. How many bags will she fill? Find the unknown in $7 \div \frac{1}{2} = r$.



- F. 9 bags G. 12 bags H. 14 bags I. 21 bags 10. _____

11. There is $\frac{1}{4}$ of a birthday cake left over. If 3 friends share it equally, what fraction of the entire cake will each friend receive? Find the unknown in $\frac{1}{4} \div 3 = c$.



- A. $\frac{1}{6}$ B. $\frac{1}{7}$ C. $\frac{1}{12}$ D. $\frac{1}{14}$ 11. _____

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

Multiply.

1. $4 \times \frac{2}{5} =$

A. $1\frac{3}{5}$

C. $2\frac{2}{5}$

B. $1\frac{2}{3}$

D. $2\frac{2}{3}$

1. _____

2. $\frac{2}{7} \times 8 =$

F. $2\frac{2}{9}$

H. $2\frac{2}{7}$

G. $2\frac{4}{7}$

I. $9\frac{2}{7}$

2. _____

3. $5 \times \frac{2}{9} =$

A. $5\frac{2}{3}$

C. $1\frac{1}{9}$

B. $5\frac{2}{9}$

D. $1\frac{2}{9}$

3. _____

4. $\frac{3}{4} \times \frac{2}{3} =$

F. $\frac{1}{4}$

H. $\frac{3}{5}$

G. $\frac{1}{3}$

I. $\frac{1}{2}$

4. _____

5. $2\frac{3}{5} \times 1\frac{12}{13} =$

A. 5

C. 7

B. 6

D. 8

5. _____

6. $2\frac{1}{6} \times 3\frac{2}{3} =$

F. $7\frac{17}{18}$

H. 7

G. $6\frac{1}{2}$

I. $8\frac{1}{6}$

6. _____

Chapter Test, Form 1B *(continued)*

Read each question carefully. Write the letter for your answer on the line provided.

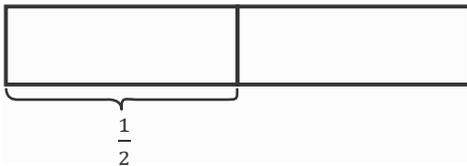
Use the models to divide.

7. $3 \div \frac{1}{3} =$



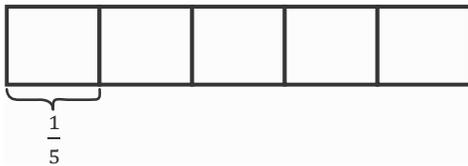
- A. 8 B. 9 C. 10 D. 12 7. _____

8. $\frac{1}{2} \div 6 =$



- F. $\frac{1}{12}$ G. $\frac{1}{14}$ H. $\frac{1}{16}$ I. $\frac{1}{18}$ 8. _____

9. $\frac{1}{5} \div 2 =$



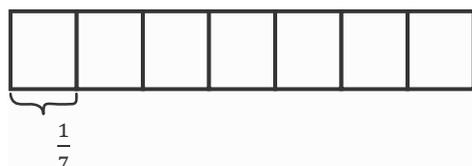
- A. $\frac{1}{18}$ B. $\frac{1}{10}$ C. $\frac{1}{8}$ D. $\frac{1}{7}$ 9. _____

10. Amanda has 5 pounds of raisins to divide equally into $\frac{1}{4}$ pound bags. How many bags can she fill? Find the unknown in $5 \div \frac{1}{4} = r$.



- F. 9 bags G. 12 bags H. 14 bags I. 20 bags 10. _____

11. There is $\frac{1}{7}$ of a birthday cake left over. If 4 friends share it equally, what fraction of the entire cake will each friend receive? Find the unknown in $\frac{1}{7} \div 4 = c$.



- A. $\frac{1}{28}$ B. $\frac{1}{24}$ C. $\frac{1}{14}$ D. $\frac{1}{11}$ 11. _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

Multiply.

1. $8 \times \frac{2}{5} =$

A. $1\frac{3}{5}$

C. $3\frac{1}{5}$

B. $2\frac{4}{5}$

D. $4\frac{1}{5}$

1. _____

2. $\frac{2}{7} \times 10 =$

F. $2\frac{2}{7}$

H. $3\frac{2}{7}$

G. $2\frac{6}{7}$

I. $3\frac{6}{7}$

2. _____

3. $\frac{1}{2} \times \frac{5}{7} =$

A. $\frac{5}{9}$

C. $\frac{5}{17}$

B. $\frac{5}{14}$

D. $\frac{5}{22}$

3. _____

4. $2\frac{2}{5} \times \frac{1}{3} =$

F. $\frac{2}{5}$

H. $\frac{4}{5}$

G. $\frac{3}{5}$

I. $1\frac{1}{5}$

4. _____

5. $4\frac{4}{25} \times 1\frac{12}{13} =$

A. 5

C. 7

B. 6

D. 8

5. _____

Solve.

6. Barry has \$55. He used $\frac{2}{5}$ of his money to buy a new pair of running shoes. How much did Barry spend on his new shoes?

F. \$21

G. \$22

H. \$23

I. \$24

6. _____

7. Iris spent $2\frac{1}{2}$ hours studying last night. She spent $\frac{1}{5}$ of this time studying science. How much time did she spend studying science?

A. $\frac{1}{2}$ h

B. $\frac{1}{5}$ h

C. $\frac{2}{5}$ h

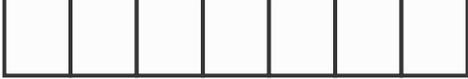
D. $\frac{3}{4}$ h

7. _____

Chapter Test, Form 2A *(continued)*

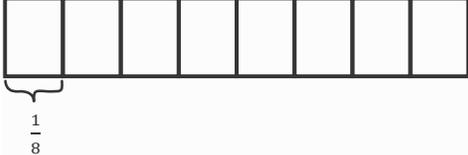
Read each question carefully. Write your answer on the line provided.

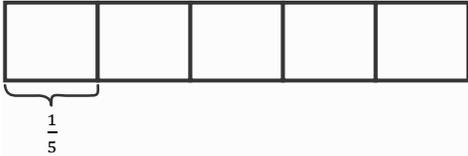
Find each quotient. Use a model.

8. $7 \div \frac{1}{8} =$  8. _____

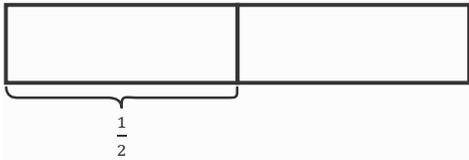
9. $9 \div \frac{1}{3} =$  9. _____

10. $4 \div \frac{1}{6} =$  10. _____

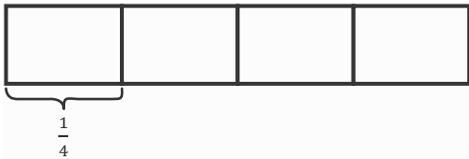
11. $\frac{1}{8} \div 6 =$  11. _____

12. $\frac{1}{5} \div 6 =$  12. _____

13. Marty has $\frac{1}{2}$ pound of raisins to divide equally into 10 different bags. What fraction of a pound will be in each bag? 13. _____



14. There is $\frac{1}{4}$ of a birthday cake left over. If 4 friends share it equally, what fraction of the entire cake will each friend receive? 14. _____



Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

Multiply.

1. $3 \times \frac{4}{5} =$

A. $1\frac{4}{5}$

C. $2\frac{3}{5}$

B. $2\frac{2}{5}$

D. $2\frac{4}{5}$

1. _____

2. $\frac{2}{7} \times 14 =$

F. 2

H. 4

G. 3

I. 5

2. _____

3. $\frac{3}{4} \times \frac{5}{9} =$

A. $\frac{5}{12}$

C. $\frac{5}{15}$

B. $\frac{5}{13}$

D. $\frac{5}{27}$

3. _____

4. $3\frac{1}{4} \times \frac{1}{3} =$

F. $1\frac{3}{12}$

H. $1\frac{1}{13}$

G. $1\frac{1}{12}$

I. $1\frac{1}{15}$

4. _____

5. $3\frac{3}{11} \times 1\frac{5}{6} =$

A. 5

C. 7

B. 6

D. 8

5. _____

Solve.

6. Wally has \$84. He used $\frac{2}{7}$ of his money to buy a new pair of running shoes. How much did Wally spend on his new shoes?

F. \$12

G. \$18

H. \$24

I. \$48

6. _____

7. Tina spent $3\frac{1}{4}$ hours studying last night. She spent $\frac{1}{3}$ of the time studying language arts. How much time did she spend studying language arts?

A. $1\frac{1}{12}$ h

B. $1\frac{1}{5}$ h

C. $1\frac{2}{3}$ h

D. $1\frac{3}{4}$ h

7. _____

Chapter Test, Form 2B *(continued)*

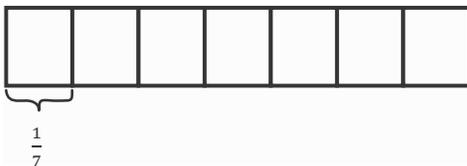
Read each question carefully. Write your answer on the line provided.

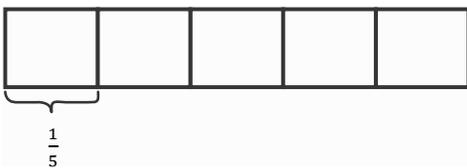
Find each quotient. Use a model.

8. $8 \div \frac{1}{3} =$  8. _____

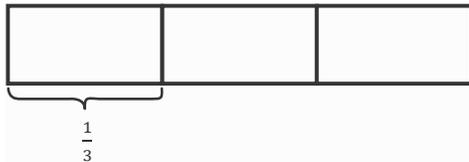
9. $4 \div \frac{1}{9} =$  9. _____

10. $3 \div \frac{1}{11} =$  10. _____

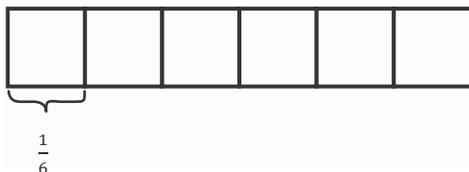
11. $\frac{1}{7} \div 6 =$  11. _____

12. $\frac{1}{5} \div 5 =$  12. _____

13. Marty has $\frac{1}{3}$ pound of raisins to divide equally into 6 different bags. What fraction of a pound will be in each bag? 13. _____



14. There is $\frac{1}{6}$ of a birthday cake left over. If 3 friends share it equally, what fraction of the entire cake will each friend receive? 14. _____



Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Multiply.

1. $4 \times \frac{3}{4} =$

1. _____

2. $\frac{2}{7} \times 15 =$

2. _____

3. $6 \times \frac{2}{11} =$

3. _____

4. $\frac{4}{5} \times \frac{4}{9} =$

4. _____

5. $\frac{3}{4} \times \frac{5}{11} =$

5. _____

6. $5\frac{1}{2} \times \frac{7}{9} =$

6. _____

7. $3\frac{2}{9} \times 1\frac{5}{7} =$

7. _____

8. $1\frac{2}{3} \times 3\frac{3}{5} =$

8. _____

Solve.

9. Jay has \$80. He used $\frac{2}{5}$ of his money to buy a new pair of running shoes. How much did Jay spend on his new shoes?

9. _____

10. Marcie spent $3\frac{3}{5}$ hours studying last night. She spent $\frac{1}{4}$ of the time studying history. How much time did she spend studying history?

10. _____

Chapter Test, Form 3A *(continued)***Divide. Draw a model if necessary.**

11. $8 \div \frac{1}{9} =$

11. _____

12. $7 \div \frac{1}{8} =$

12. _____

13. $9 \div \frac{1}{3} =$

13. _____

14. $\frac{1}{4} \div 6 =$

14. _____

15. $6 \div \frac{1}{5} =$

15. _____

16. $\frac{1}{5} \div 3 =$

16. _____

17. $7 \div \frac{1}{7} =$

17. _____

18. $\frac{1}{2} \div 3 =$

18. _____

Solve.

19. Willow has a board that is 10 feet long. She needs to cut the board into equal pieces that are $\frac{1}{3}$ feet long. How many pieces can she cut?

19. _____

20. Neil bought 2 pounds of beef. He wants to make hamburger patties that weigh $\frac{1}{4}$ pound each. How many patties can Neil make?

20. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Multiply.

1. $6 \times \frac{2}{3} =$

1. _____

2. $\frac{2}{9} \times 20 =$

2. _____

3. $6 \times \frac{5}{13} =$

3. _____

4. $\frac{5}{7} \times \frac{4}{9} =$

4. _____

5. $\frac{1}{4} \times \frac{5}{12} =$

5. _____

6. $7\frac{1}{9} \times \frac{3}{4} =$

6. _____

7. $5\frac{1}{8} \times 2\frac{2}{3} =$

7. _____

8. $2\frac{1}{5} \times 4\frac{2}{7} =$

8. _____

Solve.

9. Pietro has \$75. He used $\frac{3}{5}$ of his money to buy a new pair of running shoes. How much did Pietro spend on his new shoes?

9. _____

10. Wanda spent $4\frac{1}{8}$ hours studying last night. She spent $\frac{1}{3}$ of the time studying math. How much time did she spend studying math?

10. _____

Chapter Test, Form 3B *(continued)***Divide. Draw a model if necessary.**

11. $10 \div \frac{1}{6} =$

11. _____

12. $6 \div \frac{1}{9} =$

12. _____

13. $\frac{1}{8} \div 3 =$

13. _____

14. $\frac{1}{4} \div 2 =$

14. _____

15. $5 \div \frac{1}{5} =$

15. _____

16. $\frac{1}{2} \div 3 =$

16. _____

17. $9 \div \frac{1}{9} =$

17. _____

18. $\frac{1}{4} \div 12 =$

18. _____

Solve.

19. Ross has a board that is 12 feet long. He needs to cut the board into equal pieces that are $\frac{1}{2}$ feet long. How many pieces can she cut?

19. _____

20. Tori bought 6 pounds of sugar. She wants to divide the sugar in bags that weigh $\frac{1}{5}$ pound each. How many bags of sugar will Tori make?

20. _____

Standardized Test Practice

Read each question carefully. Fill in the correct answer.

1. Evaluate the expression if $c = 4$ and $d = 5$.

$$3c \div (d - 1) =$$

- Ⓐ 3
Ⓑ 4
Ⓒ 5
Ⓓ 6

2. Find the prime factorization of 88.

- Ⓕ 8×11
Ⓖ $2 \times 4 \times 11$
Ⓗ $2 \times 2 \times 2 \times 2 \times 11$
Ⓘ $2 \times 2 \times 2 \times 11$

3. Multiply 23.05×3.2 .

- Ⓐ 75.2
Ⓑ 73.76
Ⓒ 73.6
Ⓓ 69

4. Multiply $\frac{4}{7} \times \frac{2}{3}$.

- Ⓕ $\frac{8}{21}$
Ⓖ $\frac{6}{7}$
Ⓗ $\frac{21}{8}$
Ⓘ $1\frac{1}{7}$

5. Judy went shopping for school supplies. She bought a binder for \$1.38, a pack of pencils for \$2.05, and a box of erasers for \$3.88. She paid with a \$10-bill. How much change did Judy receive?



- Ⓐ \$6.57 Ⓒ \$3.69
Ⓑ \$4.07 Ⓓ \$2.69

6. The length of one ribbon measures $17\frac{1}{2}$ inches. The length of the other ribbon measures $24\frac{3}{4}$ inches, how many inches in length are the ribbons if they are placed end to end?



- Ⓕ $42\frac{1}{4}$ inches Ⓖ $41\frac{1}{4}$ inches
Ⓖ $42\frac{1}{2}$ inches Ⓙ $41\frac{1}{2}$ inches

GO ON ►

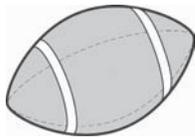
Standardized Test Practice *(continued)*

7. For every car Ming washes, she earns 3 dollars. Use the table to find how much Ming will earn after washing 15 cars.

Number of Cars Washed	1	2	3	4	5
Amount Earned (\$)	3	6	9	12	15

- (A) \$30 (C) \$60
 (B) \$45 (D) \$75

8. Ronen spent \$128 on 16 tickets to the high school football game. Determine the price of each ticket.



- (F) \$5 (H) \$7
 (G) \$6 (I) \$8

9. Tristan rode his bike $3\frac{2}{3}$ miles on Saturday. He rode $1\frac{4}{5}$ miles on Sunday. How many more miles did he ride on Saturday than on Sunday?



- (A) $\frac{13}{15}$ mile
 (B) $1\frac{3}{5}$ miles
 (C) $1\frac{13}{15}$ mile
 (D) $2\frac{13}{15}$

10. Jacqui has 40 post cards to place in her scrapbook. She can place 6 post cards on each page. How many pages will she need to place all her post cards?



- (F) 6 pages (H) 8 pages
 (G) 7 pages (I) 9 pages

11. Replace x with a number so the fractions are equivalent.

$$\frac{9}{10} = \frac{36}{x}$$

- (A) 4 (C) 30
 (B) 14 (D) 40

12. Candi has 42 books. She gives half of the books to the library and then gives some to her sister. She keeps 14 for herself. Which expression shows how to find the number of books Candi gave to her sister?



- (F) $(42 - 14) \div 2 = s$
 (G) $42 \div 14 - 2 = s$
 (H) $(42 \div 2) - 14 = s$
 (I) $42 - 14 - 2 = s$



Extended-Response Test

Demonstrate your knowledge by giving clear, concise solutions to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another sheet of paper.

1. Chandler has a large and varied comic book collection. Of his collection, $\frac{4}{5}$ of the comics are superhero comics. Of those superhero comics, $\frac{2}{9}$ are Arachna-Man comics and $\frac{1}{8}$ are Wonderdog comics.

a. Find the fraction of Chandler’s comic book collection that is made up of Arachna-Man comics. Explain how you found your answer.

b. Find the fraction of Chandler’s comic book collection that is made up of Wonderdog comics. Explain how you found your answer.

c. Find the fraction of Chandler’s comic book collection that is made up of both Arachna-Man and Wonderdog comics. Explain how you found your answer.

2. Phoebe has 4 bags of cat food. She feeds her cat $\frac{1}{5}$ of a bag each day. Find the number of days that will pass before Phoebe runs out of cat food. Draw a model to show how you found your answer.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

A recipe for one loaf of bread requires $1\frac{4}{5}$ teaspoons of yeast.

1. Use mental math to estimate about how much yeast is needed to make 9 loaves of bread.

2. Explain how you got your estimate.

3. Is your estimate less than or greater than the exact answer?

4. How many teaspoons of yeast are needed to make 9 loaves of bread? Explain how you found your answer.

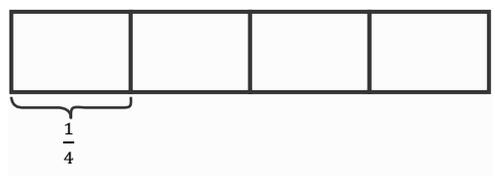
5. Use mental math to estimate the product of $3\frac{1}{3}$ and $1\frac{3}{4}$.

6. Explain how you got your estimate.

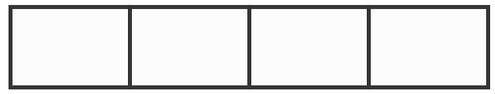
Oral Assessment *(continued)*

7. Find $3\frac{1}{3} \times 1\frac{3}{4}$. Explain how you found your answer.

8. Find $\frac{1}{4} \div 3$. Use the model to show how you found your answer.



9. Find $4 \div \frac{1}{3}$. Use the model to show how you found your answer.



Ainsley has a bag of candy that weighs 2 pounds. She wants to give each of her friends an equal amount. If each friend receives $\frac{1}{5}$ pound of candy, how many friends does Ainsley give candy?

10. Write a math sentence to represent the situation.

11. Use the model to show how you would solve the problem.



12. Solve the problem.

Am I Ready?

Practice

Multiply.

1. $13 \times 6 =$ _____

2. $25 \times 3 =$ _____

3. $19 \times 12 =$ _____

4. $86 \times 100 =$ _____

5. $15 \times 100 =$ _____

6. $7 \times 1,000 =$ _____

7. A concert was sold out for 7 straight shows. If 10,000 tickets were sold at each performance, how many tickets were sold in all?

Divide.

8. $36 \div 12 =$ _____

9. $32 \div 4 =$ _____

10. $126 \div 14 =$ _____

11. $600 \div 100 =$ _____

12. $270 \div 10 =$ _____

13. $5,800 \div 100 =$ _____

14. A strip of ribbon is 144 inches long. How many 12-inch pieces of ribbon can be made from the strip of ribbon?

Am I Ready?

Review

Multiplication

Key Concepts

- Multiply the ones first. Then multiply the tens.

$$\begin{array}{r} 1 \\ 26 \\ \times 3 \\ \hline 8 \end{array} \qquad \begin{array}{r} 1 \\ 26 \\ \times 3 \\ \hline 78 \end{array}$$

- To multiply by 10, place one 0 on the end.
- To multiply by 100, place two 0s on the end.
- To multiply by 1,000, place three 0s on the end.

$$96 \times 10 = 960$$

$$96 \times 100 = 9,600$$

$$96 \times 1,000 = 96,000$$

Multiply.

1. $12 \times 3 =$ _____

2. $46 \times 2 =$ _____

3. $15 \times 12 =$ _____

4. $14 \times 11 =$ _____

5. $4 \times 100 =$ _____

6. $8 \times 1,000 =$ _____

7. $53 \times 10 =$ _____

8. $718 \times 100 =$ _____

9. $65 \times 100 =$ _____

10. $3 \times 1,000 =$ _____

Am I Ready?

Apply

Solve.

1. Sonia has 48 crayons that belong in 2 boxes. She puts the same number of crayons in each box. How many crayons are in each box?

2. Hagos puts pictures of his friends in a photo album. The album has 16 pages that hold 6 pictures each. How many pictures can Hagos put in the photo album?

3. Tanisha has 300 feet of ribbon paper to make decorations for a school pep rally. She cuts the ribbon paper into strips of 25 feet each. How many strips of ribbon paper does she cut?

4. Kobla and each of his 4 friends have 1,000 pennies. How many pennies do they have altogether?

5. Martin buys 42 packages of paper to sell in his store. Each package has 100 sheets of paper. How many sheets of paper did Martin buy?

6. Rosalinda made 24 sandwiches for a picnic. There were 12 people at the picnic. All of the sandwiches were eaten. If each person ate the same number of sandwiches, how many sandwiches did each person have?

7. Giselle needed 3 pieces of fabric for a skirt she was making. Each piece was $2\frac{1}{2}$ feet long. How much fabric did she need in all?

8. Lily was helping her dad make a tree house. They cut a 5 ft board into 4 equal sections. How long was each section?

Diagnostic Test

Multiply.

1. $19 \times 5 =$

2. $45 \times 7 =$

3. $1,533 \times 3 =$

1. _____

2. _____

4. $16 \times 12 =$

5. $13 \times 9 =$

6. $7,008 \times 3 =$

3. _____

4. _____

7. The theater was sold out for five straight nights. If 1,850 tickets were sold each night, how many tickets were sold in all?

5. _____

6. _____

7. _____

Divide.

8. $63 \div 7 =$

8. _____

9. $82 \div 41 =$

9. _____

10. $72 \div 3 =$

10. _____

11. $54 \div 2 =$

11. _____

12. $110 \div 10 =$

12. _____

13. $2,900 \div 100 =$

13. _____

14. Mr. Johnson has a box containing 240 juice boxes. How many six-packs can he make from this box?

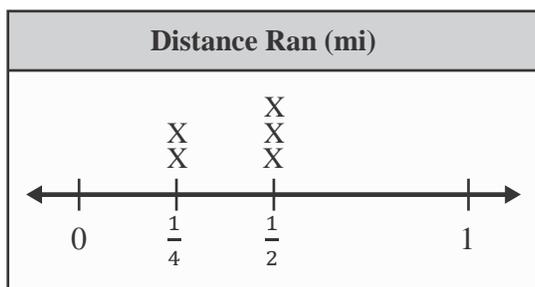
14. _____

Pretest

Complete.

- | | | |
|--------------------------------------|--|----------|
| 1. 9 ft = <input type="text"/> in. | 2. 3 mi = <input type="text"/> ft | 1. _____ |
| 3. 288 in. = <input type="text"/> yd | 4. 144 oz = <input type="text"/> lb | 2. _____ |
| 5. 3 T = <input type="text"/> lb | 6. 12 lb = <input type="text"/> oz | 3. _____ |
| 7. 40 m = <input type="text"/> cm | 8. 950 mm = <input type="text"/> cm | 4. _____ |
| 9. 3,000 m = <input type="text"/> km | 10. 5 cm = <input type="text"/> mm | 5. _____ |
| 11. 17 kg = <input type="text"/> g | 12. 12,000 g = <input type="text"/> kg | 6. _____ |
| 13. 7 L = <input type="text"/> mL | 14. 1 gal = <input type="text"/> pt | 7. _____ |

15. Find the fair share using the following line plot.



Use any strategy to solve each problem.

- | | | |
|--|---|-----------|
| 16. On her way home from school, Palama walked 5 blocks west to the grocery store, 2 blocks south to visit her aunt, then 5 blocks north to go home. What direction is her home from school? | 17. A tree is 2 meters tall. The living room ceiling is 2,100 millimeters tall. Will the tree fit in the living room? | 16. _____ |
| | | 17. _____ |

Check My Progress *(Lessons 1 through 5)*

Read each question carefully. Write your answer on the line provided.

Complete.

1. 30 in. = _____ ft 1. _____

2. 180 in. = _____ yd 2. _____

3. 384 in. = _____ ft 3. _____

4. 54 ft = _____ yd 4. _____

5. 9 lb = _____ oz 5. _____

6. 8,000 lb = _____ T 6. _____

7. 480 oz = _____ lb 7. _____

8. 15 T = _____ lb 8. _____

Solve each problem by using logical reasoning.

9. Jasmine has 5 books that she wants to read. 9. _____

She wants to read the nonfiction book first and the mystery book last. In how many different orders can she read the books?

10. On a camping trip, Vinnie hiked 3 miles south from 10. _____

his campsite to a lake. Then he hiked 4 miles west to the picnic area and 3 miles north to the observation deck. If he wants to hike back to his campsite, in which direction should Vinnie hike?

Check My Progress *(Lessons 6 through 10)*

Read each question carefully. Write your answer on the line provided.

Complete.

1. 9 c = _____ fl oz 1. _____

2. 32 qt. = _____ gal 2. _____

3. 30 pt. = _____ c 3. _____

4. 4 gal = _____ qt 4. _____

5. 384 fl oz = _____ qt 5. _____

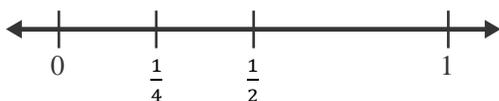
6. 8 pt = _____ fl oz 6. _____

7. 50 m = _____ cm 7. _____

8. 2,000 m = _____ km 8. _____

9. Complete the line plot of the measurements in the table.
Then find the fair share.

Amount of Apples (lb)								
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$



What is the fair share of apples, in pounds? 9. _____

Vocabulary Test

Fill in the circle next to the best answer.

- The capacity of a container is which of the following?
 - the elapsed time
 - the customary unit
 - the metric unit
 - the amount that it can hold
- When you convert from feet to inches, you are doing which of the following?
 - changing the measurement unit
 - determining capacity
 - determining length
 - changing width
- Customary units are measured in which of the following?
 - meters and centimeters only
 - inches, feet, yards, and miles
 - minutes and hours
 - days and weeks
- When the students calculated the fair share, they found which of the following?
 - a measure for how heavy an object is
 - a customary unit of capacity
 - the distance between two points
 - an amount divided equally
- Length is best described as which of the following?
 - measurement from side to side
 - distance measured between bottom and top
 - distance measured between two points
 - volume
- When finding the mass of an object, you determine which of the following?
 - the quantity of matter in the object
 - its weight
 - its height
 - its length
- The metric system is based on which of the following?
 - volume
 - decimals
 - height, weight, and length
 - inches, feet, and yards
- The weight of an object is determined by which of the following?
 - gravity
 - volume
 - height
 - none of the above

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the most reasonable unit for measuring the height of a flagpole?

- | | |
|---------|-----------|
| A. inch | C. gallon |
| B. foot | D. mile |

1. _____

Which value completes each sentence?

2. 125 ft = _____ yd _____ ft

- | | |
|---------------|---------------|
| F. 42 yd 1 ft | H. 41 yd 1 ft |
| G. 41 yd 2 ft | I. 40 yd 2 ft |

2. _____

3. 59 in. = _____ ft _____ in.

- | | |
|---------------|----------------|
| A. 4 ft | C. 4 ft 11 in. |
| B. 4 ft 9 in. | D. 5 ft |

3. _____

4. 67 oz = _____ lb _____ oz

- | | |
|---------------|---------------|
| F. 3 lb 13 oz | H. 4 lb 13 oz |
| G. 3 lb 3 oz | I. 4 lb 3 oz |

4. _____

5. 46 fl oz = _____ c _____ fl oz

- | | |
|----------------|----------------|
| A. 6 c 6 fl oz | C. 5 c 6 fl oz |
| B. 6 c 4 fl oz | D. 5 c 4 fl oz |

5. _____

6. $1\frac{1}{2}$ T = _____ lb

- | | |
|-------------|-------------|
| F. 3,500 lb | H. 2,750 lb |
| G. 3,000 lb | I. 2,500 lb |

6. _____

Chapter Test, Form 1A *(continued)*

Which value completes each sentence?

7. 75 km = _____ m

- A. 75,000 m
 B. 7,500 m
 C. 750 m
 D. 75 m

7. _____

8. 32,000 mL = _____ L

- F. 0.032 L
 G. 0.32 L
 H. 3.2 L
 I. 32 L

8. _____

9. 18 kg = _____ g

- A. 18,000 g
 B. 1,800 g
 C. 180 g
 D. 1.8 g

9. _____

10. 2 pt = _____ qt

- F. 4 qt
 G. 1 qt
 H. 2 qt
 I. 10 qt

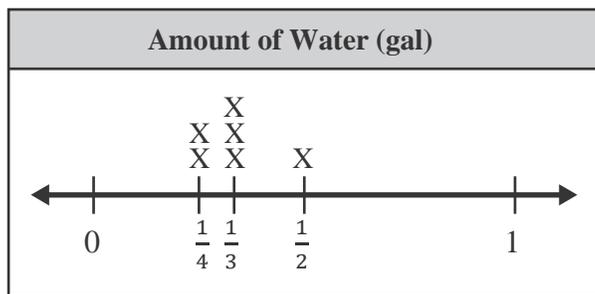
10. _____

11. 64 fl oz = _____ c

- A. 32 c
 B. 16 c
 C. 4 c
 D. 8 c

11. _____

12. Use the line plot to find the fair share.



- F. $\frac{1}{3}$ gallon
 G. $\frac{3}{2}$ gallon
 H. $\frac{2}{3}$ gallon
 I. $\frac{1}{4}$ gallon

12. _____

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the most reasonable unit for measuring the thickness of a book?

- | | |
|---------|-----------|
| A. inch | C. gallon |
| B. foot | D. mile |

1. _____

Which value completes each sentence?

2. 122 ft = _____ yd _____ ft

- | | |
|---------------|---------------|
| F. 42 yd 1 ft | H. 41 yd 1 ft |
| G. 41 yd 2 ft | I. 40 yd 2 ft |

2. _____

3. 57 in. = _____ ft _____ in.

- | | |
|---------------|----------------|
| A. 4 ft | C. 4 ft 11 in. |
| B. 4 ft 9 in. | D. 5 ft |

3. _____

4. 77 oz = _____ lb _____ oz

- | | |
|---------------|---------------|
| F. 3 lb 13 oz | H. 4 lb 13 oz |
| G. 3 lb 3 oz | I. 4 lb 3 oz |

4. _____

5. 44 fl oz = _____ c _____ fl oz

- | | |
|----------------|----------------|
| A. 6 c 6 fl oz | C. 5 c 6 fl oz |
| B. 6 c 4 fl oz | D. 5 c 4 fl oz |

5. _____

6. $1\frac{1}{4}$ T = _____ lb

- | | |
|-------------|-------------|
| F. 3,500 lb | H. 2,750 lb |
| G. 3,000 lb | I. 2,500 lb |

6. _____

Chapter Test, Form 1B *(continued)*

Which value completes each sentence?

7. 35 km = _____ m

- A. 35,000 m
- B. 3,500 m
- C. 450 m
- D. 35 m

7. _____

8. 32,000 mL = _____ L

- F. 0.032 L
- G. 0.32 L
- H. 3.2 L
- I. 32 L

8. _____

9. 18 kg = _____ g

- A. 18,000 g
- B. 1,800 g
- C. 180 g
- D. 1.8 g

9. _____

10. 4 pt = _____ qt

- F. 4 qt
- G. 1 qt
- H. 2 qt
- I. 10 qt

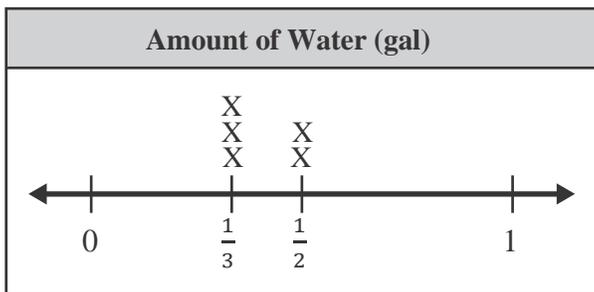
10. _____

11. 32 fl oz = _____ c

- A. 32 c
- B. 16 c
- C. 4 c
- D. 8 c

11. _____

12. Use the line plot to find the fair share.



- F. $\frac{3}{4}$ gallon
- G. $\frac{2}{3}$ gallon
- H. $\frac{1}{2}$ gallon
- I. $\frac{2}{5}$ gallon

12. _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

Which value completes each sentence?

1. 145 ft = _____ yd _____ ft
 A. 46 yd 1 ft
 B. 48 yd 2 ft
 C. 48 yd 1 ft
 D. 50 yd 2 ft
 1. _____

2. 67 in. = _____ ft _____ in.
 F. 5 ft 7 in.
 G. 5 ft 9 in.
 H. 5 ft 11 in.
 I. 6 ft
 2. _____

3. $3\frac{1}{2}$ T = _____ lb
 A. 3,500 lb
 B. 6,000 lb
 C. 6,500 lb
 D. 7,000 lb
 3. _____

4. 66 fl oz = _____ c _____ fl oz
 F. 8 c 2 fl oz
 G. 8 c 3 fl oz
 H. 6 c 6 fl oz
 I. 6 c 4 fl oz
 4. _____

5. 38 oz = _____ lb _____ oz
 A. 2 lb 1 oz
 B. 2 lb 3 oz
 C. 2 lb 6 oz
 D. 3 lb 8 oz
 5. _____

6. 5 km = _____ m
 F. 50,000 m
 G. 5,000 m
 H. 500 m
 I. 50 m
 6. _____

7. 45 L = _____ mL
 A. 450,000 mL
 B. 45,000 mL
 C. 4,500 mL
 D. 450 mL
 7. _____

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

8. 75,000 g = _____ kg

F. 7,500 kg

H. 75 kg

G. 750 kg

I. 7.5 kg

8. _____

9. 12,000 mm = _____ cm

A. 120,000 cm

C. 120 cm

B. 12 cm

D. 1,200 cm

9. _____

10. 1 gal = _____ pt

F. 32 pt

H. 16 pt

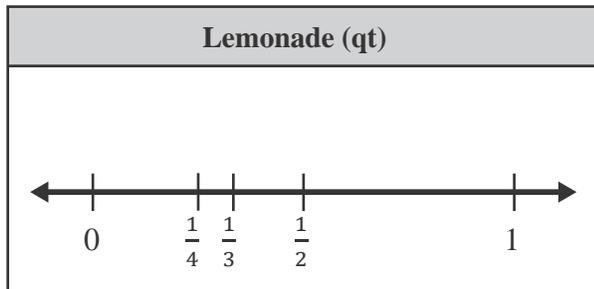
G. 4 pt

I. 8 pt

10. _____

11. Use the measurements in the table to fill in the line plot. Then find the fair share.

Amount of Lemonade (qt)					
$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{3}$



11. _____

Solve.

12. Lana and Kristy measured the length between their desks. They found that the desks were 6 feet apart. How many inches apart are Lana and Kristy's desks?

12. _____

13. For a party, Mr. and Mrs. Rodriguez made $4\frac{1}{2}$ gallons of fruit punch. How many quarts of punch did they make?

13. _____

14. Alvin ran a 5-kilometer race. When he was halfway to the finish line, how many meters did he have left to run?

14. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

Which value completes each sentence?

1. 139 ft = _____ yd _____ ft

A. 46 yd 1 ft

B. 48 yd 2 ft

C. 48 yd 1 ft

D. 50 yd 2 ft

1. _____

2. 69 in. = _____ ft _____ in.

F. 5 ft 7 in.

G. 5 ft 9 in.

H. 5 ft 11 in.

I. 6 ft

2. _____

3. $3\frac{1}{4}$ T = _____ lb

A. 3,500 lb

B. 6,000 lb

C. 6,500 lb

D. 7,000 lb

3. _____

4. 54 fl oz = _____ c _____ fl oz

F. 8 c 2 fl oz

G. 8 c 3 fl oz

H. 6 c 6 fl oz

I. 6 c 4 fl oz

4. _____

5. 56 oz = _____ lb _____ oz

A. 2 lb 1 oz

B. 2 lb 3 oz

C. 2 lb 6 oz

D. 3 lb 8 oz

5. _____

6. 5 km = _____ m

F. 50,000 m

G. 5,000 m

H. 500 m

I. 50 m

6. _____

7. 450 L = _____ mL

A. 450,000 mL

B. 45,000 mL

C. 4,500 mL

D. 450 mL

7. _____

Chapter Test, Form 2B *(continued)*

Read each question carefully. Write your answer on the line provided.

8. 750 g = _____ mg

F. 750 mg

H. 75,000 mg

G. 7,500 mg

I. 750,000 mg

8. _____

9. 120 mm = _____ cm

A. 120,000 cm

C. 120 cm

B. 12 cm

D. 1,200 cm

9. _____

10. 2 gal = _____ pt

F. 32 pt

H. 16 pt

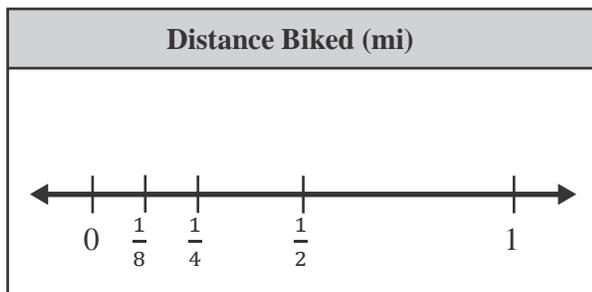
G. 4 pt

I. 8 pt

10. _____

11. Use the measurements in the table to fill in the line plot. Then find the fair share.

Distance Biked (mi)						
$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{4}$



11. _____

Solve.

12. Laurel and Kristin measured the length between their desks. They found that the desks were $5\frac{1}{2}$ feet apart.

How many inches apart are Laurel and Kristin's desks?

12. _____

13. For a party, Mr. and Mrs. Kemper made $7\frac{1}{4}$ gallons of fruit punch. How many quarts of punch did they make?

13. _____

14. Alvin ran an 8-kilometer race. When he was halfway to the finish line, how many meters did he have left to run?

14. _____

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Complete.

1. 28 ft = _____ yd _____ ft 1. _____
2. 68 in. = _____ ft _____ in. 2. _____
3. 30 oz = _____ lb _____ oz 3. _____
4. $2\frac{1}{2}$ T = _____ lb 4. _____
5. 97 fl oz = _____ c _____ fl oz 5. _____

Solve.

6. Wally and Sharon are seeing who can throw a baseball farther. Wally threw the ball 35 yards, and Sharon threw the ball 123 feet. Who threw the baseball farther? 6. _____
7. For a meeting, Mr. and Mrs. Gonzalez made $3\frac{1}{2}$ gallons of coffee. How many quarts of coffee did they make? 7. _____
8. Elliott threw a disc 35 feet and 10 inches. How many inches total did he throw the disc? 8. _____
9. Bailey and Edna bought a puppy that weighed 12 pounds and 9 ounces. How many ounces total did the puppy weigh? 9. _____

Complete.

10. 5 g = _____ mg 10. _____
11. 4 m = _____ mm 11. _____

Chapter Test, Form 3A *(continued)*

12. 28 L = _____ mL 12. _____

13. 68 g = _____ mg 13. _____

14. 95,000 m = _____ km 14. _____

Solve.

15. Cady's book has a mass of 800 grams. What is that mass in milligrams? 15. _____

16. Howie wants to measure the distance between Seattle, Washington, and Baltimore, Maryland. Which metric unit should he use? 16. _____

Complete.

17. 47 cm = _____ mm 17. _____

18. 32 qt = _____ gal 18. _____

19. 62 c = _____ pt 19. _____

20. Make a line plot of the measurements in the table. Then find the fair share.

Distance Ran (mi)									
$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{4}$

Fair Share _____

20. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Complete.

- | | |
|-----------------------------------|----------|
| 1. 52 ft = _____ yd _____ ft | 1. _____ |
| 2. 78 in. = _____ ft _____ in. | 2. _____ |
| 3. 41 oz = _____ lb _____ oz | 3. _____ |
| 4. $4\frac{3}{4}$ T = _____ lb | 4. _____ |
| 5. 76 fl oz = _____ c _____ fl oz | 5. _____ |

Solve.

- | | |
|--|----------|
| 6. Beau and Liz are seeing who can throw a football farther. Beau threw the ball 27 yards, and Liz threw the ball 74 feet. Who threw the football farther? | 6. _____ |
| 7. For a party, Mr. and Mrs. Ramirez made 3 gallons of juice. How many quarts of juice did they make? | 7. _____ |
| 8. Samuel threw a disc 32 feet and 9 inches. How many inches total did he throw the disc? | 8. _____ |
| 9. Clark and Marlana bought a kitten that weighed 2 pounds and 11 ounces. How many total ounces did the kitten weigh? | 9. _____ |

Complete.

- | | |
|-------------------------|-----------|
| 10. 61 g = _____ mg | 10. _____ |
| 11. 35,000 m = _____ km | 11. _____ |

Chapter Test, Form 3B *(continued)*

12. 57 L = _____ mL

12. _____

13. 114,000 mL = _____ L

13. _____

14. 15,000 m = _____ km

14. _____

Solve.

15. Lewis's book has a mass of 1 kilogram. What is that mass in grams?

15. _____

16. Karissa wants to measure the width of her book. Which metric unit should she use?

16. _____

Complete.

17. 230 cm = _____ mm

17. _____

18. 64 qt = _____ gal

18. _____

19. 52 c = _____ pt

19. _____

20. Make a line plot of the measurements in the table. Then find the fair share.

Distance Ran (mi)							
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$

Fair Share _____

20. _____

Standardized Test Practice

Read each question. Fill in the correct answer.

1. Dalia is allowed to download 2 new songs each week. Use the table to find how many songs she will have downloaded by the end of Week 5?

Input	1	2	3	4	5
Output	2	4	6	8	■

- (A) 8 (C) 12
 (B) 10 (D) 20

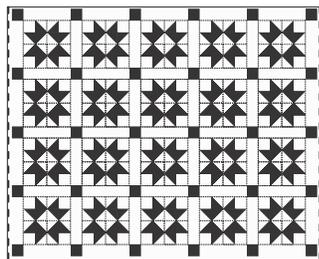
4. Jeb practices basketball 1.4 hours on Monday. On Wednesday, he practices for 3.25 hours. How much longer did Jeb practice on Wednesday than on Monday?

- (F) 1.4 hours
 (G) 1.85 hours
 (H) 3.25 hours
 (I) 4.65 hours



2. Bridget is making a quilt. She buys $5\frac{1}{3}$ yards of fabric from the craft store. How many feet of fabric is that?

- (F) 14 feet
 (G) 15 feet
 (H) 16 feet
 (I) 17 feet



5. Stu is purchasing paint for an art project. He buys 2 pints of purple paint, 2 pints of yellow paint, 3 pints of orange paint, and $1\frac{1}{2}$ pints of blue paint. How many cups of paint did he buy altogether?

- (A) 9 cups
 (B) $8\frac{1}{2}$ cups
 (C) $10\frac{1}{2}$ cups
 (D) 17 cups



3. Stanley has a collection of 891 baseball cards that he wants to put into a binder. Each page of his binder holds 9 cards. How many pages does Stanley need in order to put all of his cards in the binder?

- (A) 100 pages
 (B) 99 pages
 (C) 89 pages
 (D) 80 pages



6. The width of Nora's backyard is 12 yards. What is the width of Nora's backyard in feet?

- (F) 4 feet
 (G) 12 feet
 (H) 24 feet
 (I) 36 feet

GO ON ►

Standardized Test Practice *(continued)*

7. Use the measurements in the table to find the fair share.

Nail Length (in)							
$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{2}$

- Ⓐ $\frac{1}{2}$ Ⓒ $\frac{1}{4}$
 Ⓑ $\frac{2}{3}$ Ⓓ $\frac{3}{8}$

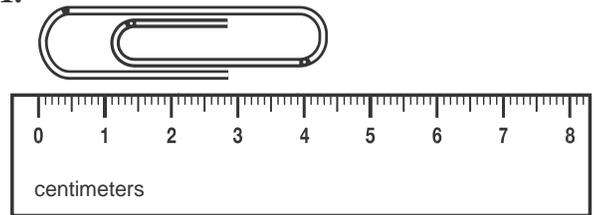
10. Willard drove 5280 feet, from his house to his aunt's house. How many miles did he drive?

- Ⓕ 1 mile
 Ⓖ 2 miles
 Ⓗ 3 miles
 Ⓘ 4 miles

8. Arianna is weighing a cake that she made for her brother's birthday. Which is the most reasonable estimate for the weight of a cake?

- Ⓕ 1 pound
 Ⓖ 1 ton
 Ⓗ 1 ounce
 Ⓘ 1 pint

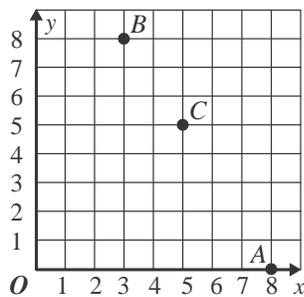
- 11.



What is the length, in centimeters, of the paper clip shown above?

- Ⓐ 4 cm Ⓒ 5 cm
 Ⓑ $4\frac{1}{2}$ cm Ⓓ $5\frac{1}{2}$ cm

Use the coordinate graph for Exercise 9.



9. Which point has the coordinates (5, 5)?

- Ⓐ Point A Ⓒ Point C
 Ⓑ Point B Ⓓ None of these

12. Michael is building a birdhouse. He needs a piece of wood that is 3 feet in length. How many inches are in 3 feet?

- Ⓕ 12 inches
 Ⓖ 24 inches
 Ⓗ 30 inches
 Ⓘ 36 inches



Extended-Response Test

Demonstrate your knowledge by giving a clear, concise solution to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another piece of paper.

1. In this chapter, you learned several different customary measurement units for length, capacity, and weight. Which unit would you use to measure the following? Explain your reasoning.

a. the amount of water needed to fill a swimming pool

b. the height of your desk

2. a. Explain how you convert larger units of weight to smaller units. Provide an example.

b. Explain how you would convert smaller units of capacity to larger units. Provide an example.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

1. You need 2 yards of fabric for a project. How many feet is this?

2. How many inches are in 2 yards?

3. Tell how you found your answer.

4. If you had 4 pints, would this be equal to 2 quarts or 2 gallons?

5. How many cups are in one quart?

6. Explain your answer.

7. If a recipe called for a pint of molasses, and you had 16 fluid ounces of molasses, would you have enough?

8. Explain how you know.

Oral Assessment *(continued)*

9. Which is the most reasonable estimate for the capacity of a large swimming pool: 2,000 fluid ounces, 3,000 cups, or 3,000 gallons? Explain.

10. The width of a garden measures 8 feet. What is the width of the garden in inches?

11. A baby weighs 136 ounces at birth. How many pounds is this?

12. Which is the most reasonable estimate for the width of a house: 12 millimeters, 12 centimeters, 12 meters, or 12 kilometers? Explain.

13. One chipmunk has a mass of 85 grams. Another chipmunk has a mass of 83,500 milligrams. Which chipmunk has the greater mass?

14. Tell how you found your answer.

15. How many milliliters are in 6 liters?

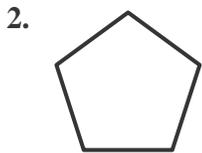
Am I Ready?

Practice

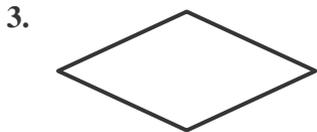
Name the number of sides and the number of angles in each figure.



1. _____

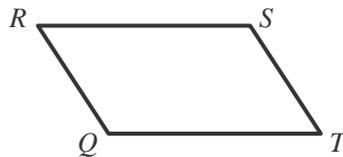


2. _____



3. _____

Use the figure at the right for Exercises 4 and 5.



4. Which side appears to have the same length as side RS ?

4. _____

5. At which point do sides ST and TQ meet?

5. _____

6. Draw a triangle that has two sides that are equal.

6. _____

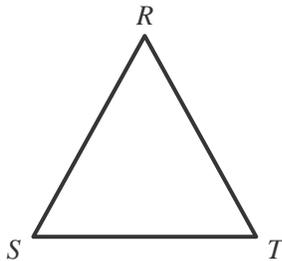
Am I Ready?

Review

Use the figure below to make each statement true.



1. Side AB appears to be the same length as side _____
2. Side _____ appears to be the same length as side BD .
3. Side AC and side CD meet at point _____
4. Side _____ and side _____ meet at point D .
5. Side AB and side _____ meet at point B .



Use the figure above for Exercises 6-8.

6. Name the three sides of the triangle.

7. Which two sides meet at point R ?

8. Which side is opposite point S ?

Am I Ready?

Apply

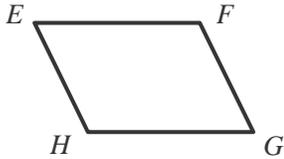
1. The figure below shows the shape of a table. Name the number of sides and the number of angles.



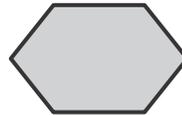
2. The drawing below shows a skateboarding ramp. At which point do sides AC and BC meet?



3. Mario drew a design using the shape shown below. Which side appears to be the same length as side FG ?



4. The figure below shows the shape of stones in a patio. Name the number of sides and the number of angles.



5. Allie is drawing a triangle with no sides that are equal. Draw a sketch of this triangle.

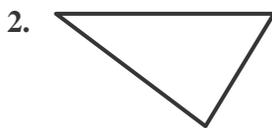
6. Joshua drew a picture of his house. The shape he drew was a rectangle. How many sides and angles did his picture have?

Diagnostic Test

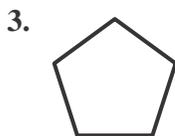
Name the number of sides and the number of angles in each figure.



1. _____

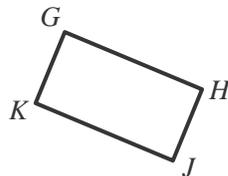


2. _____



3. _____

Use the figure at the right for Exercises 4-6.



4. Which side appears to have the same length as side KJ ?

4. _____

5. At which point do sides KG and GH meet?

5. _____

6. Which two sides meet at point J ?

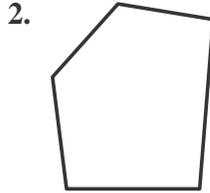
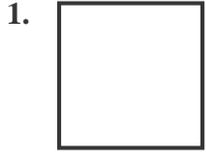
6. _____

7. Sketch a four-sided figure that has all sides equal.

7. _____

Pretest

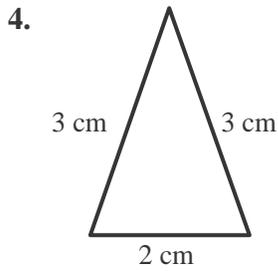
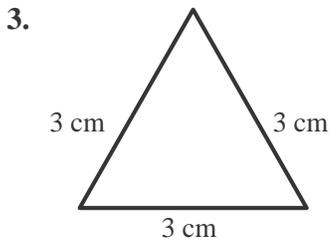
Name each polygon. Determine if it appears to be *regular* or *not regular*.



1. _____

 2. _____

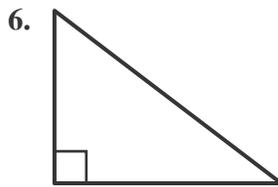
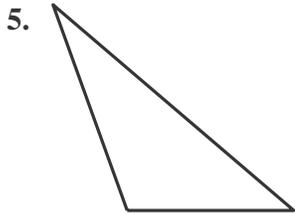
Classify each triangle based on its sides.



3. _____

 4. _____

Classify each triangle based on its angles.

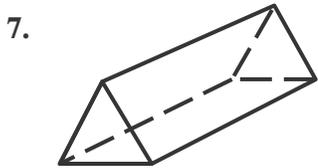


5. _____

 6. _____

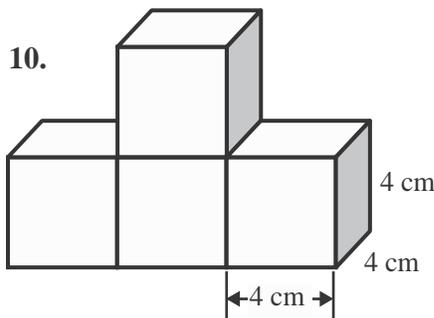
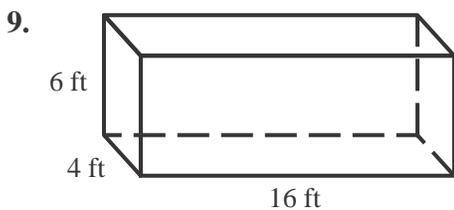
 7. _____

Describe the faces, edges, and vertices of each three-dimensional figure. Then identify it.



8. _____

Find the volume of each prism.

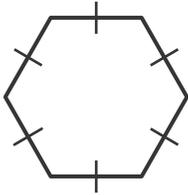


9. _____
 10. _____

Check My Progress *(Lessons 1 through 3)*

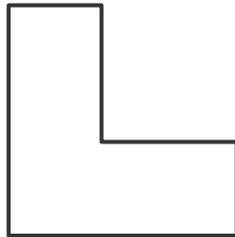
Name the polygon. Determine if it appears to be *regular* or *not regular*.

1.



1. _____

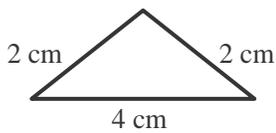
2.



2. _____

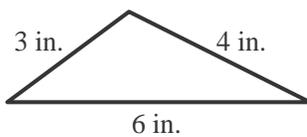
Determine the number of congruent sides. Then classify the triangle based on its sides.

3.



3. _____

4.



4. _____

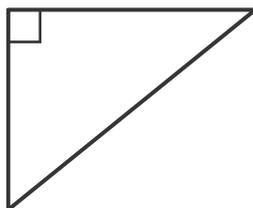
Classify the triangle based on its angles.

5.



5. _____

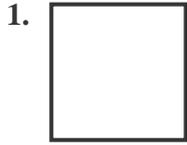
6.



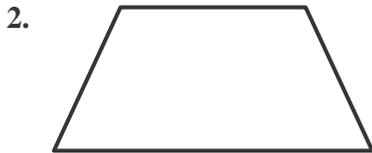
6. _____

Check My Progress *(Lessons 4 through 7)*

Describe the attributes of each quadrilateral. Then classify the quadrilateral.

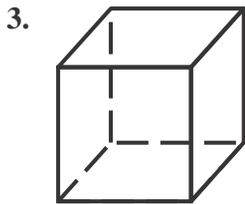


1. _____

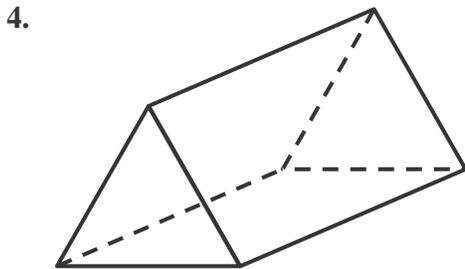


2. _____

Describe the faces, edges, and vertices of each three-dimensional figure. Then identify it.



3. _____



4. _____

5. Nathan drew a picture of a rectangle. Describe any parallel, perpendicular, or congruent sides of his picture.

5. _____

Vocabulary Test

Using the word bank below, complete each sentence by writing the correct term in the blank.

face	rectangular prism	scalene triangle	isosceles triangle
congruent	vertex	equilateral triangle	volume
composite figure			

1. A three-sided figure that has two sides of equal length is called a(n) _____.
2. A three-sided figure with all three sides of equal length is called a(n) _____.
3. A three-dimensional figure that is made up of other three-dimensional figures is called a _____.
4. The amount of space a three-dimensional figure contains.
The formula for _____ of a rectangular prism is $\text{length} \times \text{width} \times \text{height}$.
5. A three-sided figure having all three sides of different lengths is called a(n) _____.
6. Two figures that have the same size and shape are _____.
7. A _____ is where three edges meet on a three-dimensional figure.
8. A prism with two rectangular, identical bases is called a _____.
9. The rectangular base of a prism is called a _____.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

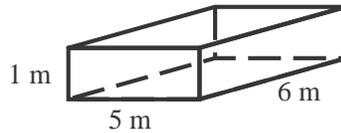
1. How many faces, edges, and vertices does a box of cereal have?

- A. 6 faces, 10 edges, 6 vertices
- B. 6 faces, 12 edges, 8 vertices
- C. 6 faces, 10 edges, 8 vertices
- D. 6 faces, 12 edges, 10 vertices

1. _____

2. What is the volume?

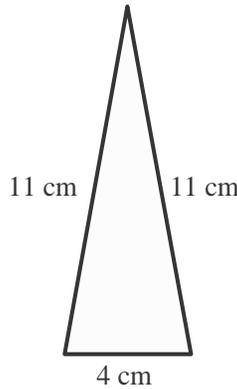
- F. 30 m^3
- G. 45 m^3
- H. 90 m^3
- I. 135 m^3



2. _____

3. Classify the triangle by its sides.

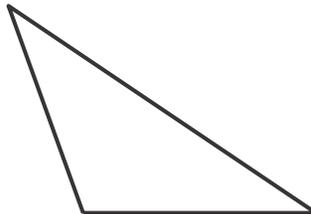
- A. acute triangle
- B. equilateral triangle
- C. isosceles triangle
- D. scalene triangle



3. _____

4. Classify the triangle by its angles.

- F. equilateral triangle
- G. right triangle
- H. acute triangle
- I. obtuse triangle



4. _____

5. Select one attribute that describes the quadrilateral.

- A. Both pairs of opposite sides are congruent and parallel.
- B. All sides are an equal length.
- C. There are no right angles.
- D. Only one pair of opposite sides are parallel.



5. _____

Chapter Test, Form 1A *(continued)*

6. A store is stacking cans of food into a triangular display. The bottom layer has 11 cans. There are 6 layers. If there are two fewer cans in each layer, how many cans are in the display?
- F. 34 cans H. 36 cans
G. 35 cans I. 37 cans
6. _____
7. Adel makes a composite figure by stacking 4 rectangular prisms that are each 3 inches by 5 inches by 7 inches. Find the volume for the composite figure.
- A. 420 in^2 C. 693 in^2
B. 420 in^3 D. 693 in^3
7. _____
8. Mr. Ayala wants to fill a canister with peanuts. Which measurement does he need to find to determine the amount of peanuts that will fit?
- F. area H. surface area
G. perimeter I. volume
8. _____
9. Mrs. Smith stacked 6 cubes on top of one another to make a tower. If the tower is sitting on the floor, how many of the cubes' faces can Mrs. Smith see?
- A. 24 faces C. 26 faces
B. 25 faces D. 30 faces
9. _____
10. Shu Ping draws a regular hexagon. The total length of the sides is 30 feet. What is the length of one side?
- F. 5 feet H. 7 feet
G. 6 feet I. 8 feet
10. _____
11. Rosa drew a triangle with sides measuring 36 inches, 20 inches, and 24 inches. What type of triangle did Rosa draw?
- A. equilateral triangle C. scalene triangle
B. acute triangle D. isosceles triangle
11. _____

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided

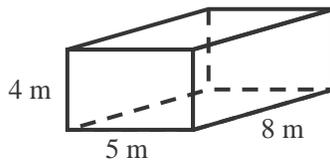
1. How many faces, edges, and vertices does a number cube have?

- A. 6 faces, 8 vertices, 6 edges
- B. 6 faces, 10 vertices, 10 edges
- C. 6 faces, 8 vertices, 12 edges
- D. 6 faces, 10 vertices, 8 edges

1. _____

2. What is the volume?

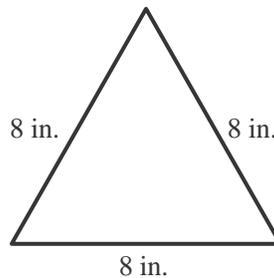
- F. 175 m^3
- G. 160 m^3
- H. 80 m^3
- I. 28 m^3



2. _____

3. Classify the triangle by its sides.

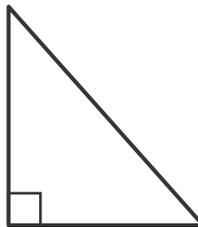
- A. acute triangle
- B. equilateral triangle
- C. isosceles triangle
- D. scalene triangle



3. _____

4. Classify the triangle by its angles.

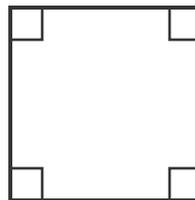
- F. equilateral triangle
- G. acute triangle
- H. right triangle
- I. obtuse triangle



4. _____

5. Select one attribute that describes the quadrilateral.

- A. No sides are congruent or parallel.
- B. Only one pair of opposite sides are parallel.
- C. There are no right angles.
- D. All sides are an equal length.



5. _____

Chapter Test, Form 1B *(continued)*

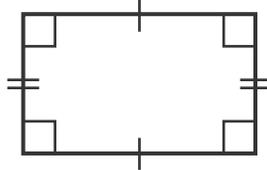
6. A store is stacking cans of food into a triangular display. The bottom layer has 12 cans. There are 6 layers. If there are two fewer cans in each layer, how many cans are in the display?
- F. 41 cans H. 43 cans
G. 42 cans I. 44 cans
6. _____
7. Adrianna makes a composite figure by stacking 4 rectangular prisms that are each 4 inches by 2 inches by 6 inches. Find the volume for the composite figure.
- A. 192 in^3 C. 240 in^2
B. 192 in^2 D. 240 in^3
7. _____
8. Nigel wants to fill a canister with popcorn. Which measurement does he need to find to determine the amount of popcorn that will fit?
- F. area H. surface area
G. perimeter I. volume
8. _____
9. Odette stacked 7 cubes on top of one another to make a tower. If the tower is sitting on the floor, how many of the cubes' faces can Odette see?
- A. 29 faces C. 32 faces
B. 30 faces D. 35 faces
9. _____
10. Perry draws a regular hexagon. The total length of the sides is 48 feet. What is the length of one side?
- F. 7 feet H. 9 feet
G. 8 feet I. 13 feet
10. _____
11. Desta drew a triangle with sides measuring 20 inches, 15 inches, and 15 inches. What type of triangle did Rosa draw?
- A. equilateral triangle
B. right triangle
C. isosceles triangle
D. scalene triangle
11. _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which term best classifies the quadrilateral?

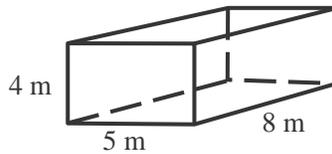
- A. parallelogram
- B. rhombus
- C. rectangle
- D. square



1. _____

2. What is the volume?

- F. 160 m^3
- G. 184 m^2
- H. 200 m^2
- I. 200 m^3



2. _____

3. Which three-dimensional figure has 5 faces, 9 edges, and 6 vertices?

- A. rectangular prism
- B. triangle
- C. cube
- D. triangular prism

3. _____

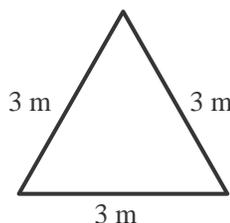
4. Rosemary is packing boxes of crackers into a crate. She can fit 6 boxes along the bottom of the crate. If the crate is filled with 5 layers of cracker boxes, how many cracker boxes are in the crate?

- F. 24 boxes
- G. 25 boxes
- H. 30 boxes
- I. 36 boxes

4. _____

5. What type of triangle is shown?

- A. obtuse triangle
- B. isosceles triangle
- C. equilateral triangle
- D. scalene triangle



5. _____

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

6. Describe the number of faces, edges, and vertices of a math book.

6. _____

7. Describe the faces, edges, and vertices of the three-dimensional figure. Then identify it.



7. _____

8. Find the volume of a rectangular prism with length 11 meters, width 4 meters, and height 15 meters.

8. _____

9. Walter has a triangle that measures 24 inches by 18 inches by 36 inches. What type of triangle does he have?

9. _____

10. How much cement is needed to build a sidewalk that is 180 inches long, 24 inches wide, and 4 inches thick?

10. _____

11. Ty is painting a rectangle that is 10 inches long and 7 inches high. What attributes of a rectangle can you share with Ty to help him paint his rectangle?

11. _____

12. Zain bought ice cream and sherbet at the grocery store and is placing the containers in the freezer. The container of ice cream was sold in a $10'' \times 14'' \times 12''$ container, and the sherbet was sold in an $11'' \times 18'' \times 9''$ container. How much less space does the container of ice cream occupy than the container of sherbet?

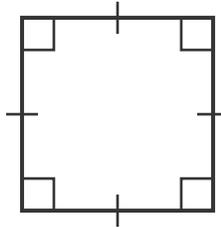
12. _____

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided

1. Which term best classifies the quadrilateral?

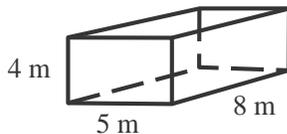
- A. trapezoid
- B. rhombus
- C. rectangle
- D. square



1. _____

2. What is the volume?

- F. 160 m^3
- G. 80 m^3
- H. 28 m^3
- I. 17 m^3



2. _____

3. Which three-dimensional figure has 6 square faces, 12 edges, and 8 vertices?

- A. rectangular prism
- B. triangle
- C. triangular prism
- D. cube

3. _____

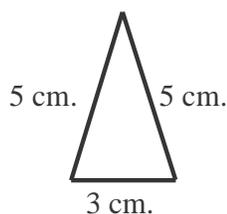
4. Nena is packing boxes of wafers into a shipping box. She can fit 7 boxes along the bottom of the box. If the box is filled with 4 layers of wafer boxes, how many wafer boxes are in the packing box?

- F. 14 boxes
- G. 16 boxes
- H. 26 boxes
- I. 28 boxes

4. _____

5. What type of triangle is shown?

- A. isosceles triangle
- B. right triangle
- C. scalene triangle
- D. equilateral triangle



5. _____

Chapter Test, Form 2B *(continued)*

Read each question carefully. Write your answer on the line provided.

6. Describe the number of faces, edges, and vertices of a triangular prism.

6. _____

7. Describe the faces, edges, and vertices of the three-dimensional figure. Then identify it.



7. _____

8. Find the volume of a rectangular prism with length 7 feet, width 6 feet, and height 4 feet.

8. _____

9. Seth has a triangle that measures 20 inches by 20 inches by 35 inches. What type of triangle does he have?

9. _____

10. How much cement is needed to build a sidewalk that is 132 inches long, 24 inches wide, and 3 inches thick?

10. _____

11. Tad is painting a square whose sides each measure 11 feet long. What attributes of a square can you share with Tad to help him paint his figure?

11. _____

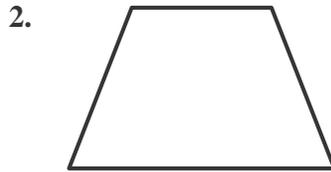
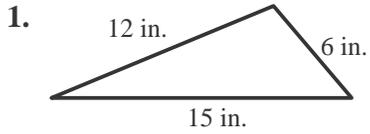
12. Yuri bought ice cream and sherbet at the grocery store and is placing the containers in the freezer. The container of ice cream was sold in an $11'' \times 15'' \times 13''$ container, and the sherbet was sold in a $12'' \times 19'' \times 9''$ container. How much more space does the container of ice cream occupy than the container of sherbet?

12. _____

Chapter Test, Form 3A

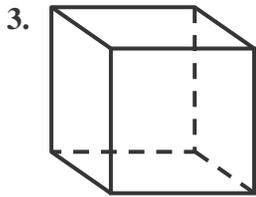
Read each question carefully. Write your answer on the line provided.

Classify each figure.



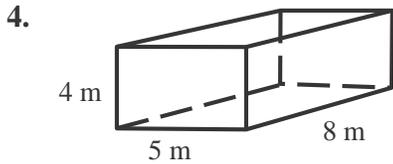
1. _____

2. _____

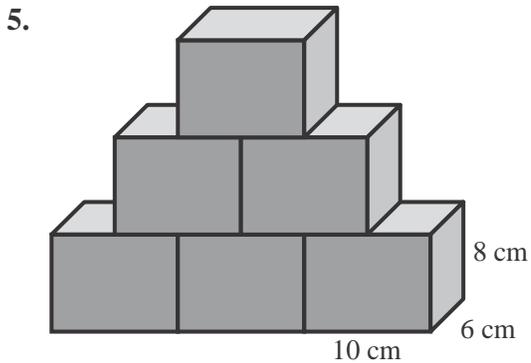


3. _____

Find the volume of each figure.



4. _____



5. _____

6. rectangular prism

$\ell = 8 \text{ m}, w = 4 \text{ m}, h = 7 \text{ m}$

6. _____

Chapter Test, Form 3A *(continued)*

7. Describe the faces, edges, and vertices of a triangular prism. 7. _____

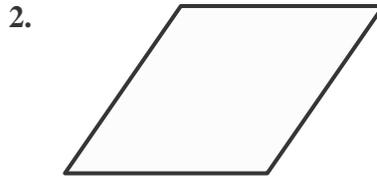
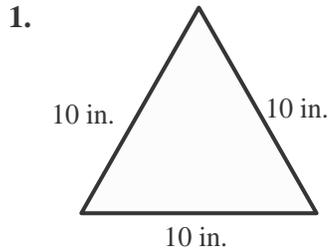
8. Describe the sides of a scalene triangle. 8. _____

9. Claudia is building a three-dimensional figure that has 6 square faces, 12 edges, and 8 vertices. What shape is she building? 9. _____
10. Leon wants to use a box for storage. If the box is 11 inches high, 13 inches wide, and 18 inches deep, how many cubic inches of space does he have for storage? 10. _____
11. Mykey and Roy are designing a kitchen counter. The counter has 4 sides. Opposite sides are parallel and congruent. Each corner of the counter is a right angle. Classify the shape of the kitchen counter. 11. _____
12. Kuron Pool is a rectangular prism with length 15 feet, width 8 feet, and height 5 feet. Find the volume of the pool. 12. _____
13. Ervin is building two cabinets. They are each 2 feet tall, 2 feet long, and 1 foot wide. What is their total volume? 13. _____

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Classify each figure.



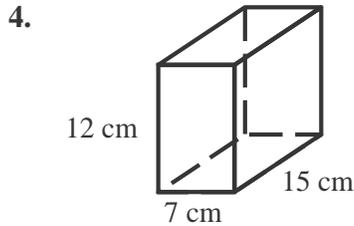
1. _____

2. _____

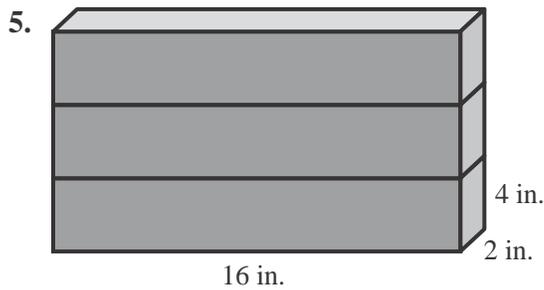


3. _____

Find the volume of each figure.



4. _____



5. _____

6. rectangular prism

$\ell = 9 \text{ m}, w = 4 \text{ m}, h = 15 \text{ m}$

6. _____

Chapter Test, Form 3B *(continued)*

7. Describe the faces, edges, and vertices of a rectangular prism. 7. _____

8. Describe the faces, edges, and vertices of a triangular prism. 8. _____

9. Cheryl is building a three-dimensional figure that has 5 faces, 9 edges, and 6 vertices. What shape is she building? 9. _____
10. Horace wants to use a plastic tote for storage. If the tote is 8 inches high, 18 inches wide, and 12 inches deep, how many cubic inches of space does he have for storage? 10. _____
11. DaVaughn and Henrick are designing a kitchen counter. The counter has 4 sides. One pair of opposite sides are parallel and congruent. There are no right angles. Classify the shape of the kitchen counter. 11. _____
12. A piranha tank is $12'' \times 6'' \times 10''$. What is the volume of the tank? 12. _____
13. Carly is stacking 4 shoe boxes on top of each other. If each box is 8 inches long, 7 inches wide, and 4 inches high, what is the total volume? 13. _____

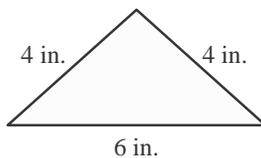
Standardized Test Practice

Read each question. Fill in the correct answer.

1. Bernadine receives an annual salary of \$24,544. She receives 52 equal paychecks throughout the year. How much does she receive in each paycheck?

- (A) \$452
- (B) \$472
- (C) \$572
- (D) \$672

2. Sampson drew the triangle below. Classify the triangle by its sides.



- (F) scalene triangle
- (G) right triangle
- (H) equilateral triangle
- (I) isosceles triangle

3. What is the missing value in the table?

Input	1	2	3	4	5
Output	4	■	10	13	16

- (A) 9
- (B) 8
- (C) 7
- (D) 6

4. Marcy wants to store toys in a bin that has a length of 11 inches, a width of 7 inches, and a height of 6 inches. How much space is inside the bin?

- (F) 370 in^3
- (G) 462 in^3
- (H) 470 in^3
- (I) 562 in^3

5. Savannah practiced ballet 1.67 hours on Monday. On Wednesday, she practiced for 3.25 hours. How much longer did Savannah practice on Wednesday than on Monday?

- (A) 1.58 hours
- (B) 2.42 hours
- (C) 3.42 hours
- (D) 4.92 hours

6. Ethan saw the following three-dimensional figure. Classify the figure.



- (F) rectangular prism
- (G) triangular prism
- (H) cube
- (I) rectangle

Standardized Test Practice *(continued)*

7. How many pairs of opposite sides are parallel in a trapezoid?

- (A) 0
- (B) 1
- (C) 2
- (D) 3

8. Bus A arrives at the bus stop every 15 minutes, and Bus B arrives every 20 minutes. Both are at the bus stop right now. In how many minutes will both buses be at the bus stop again?

- (F) 5 min
- (G) 20 min
- (H) 60 min
- (I) 120 min

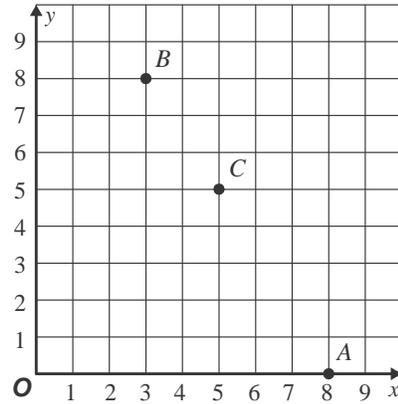
9. The width of Jamison's yard is $41\frac{1}{8}$ feet. What is the width of his neighbor's yard if it is $3\frac{7}{8}$ feet shorter than Jamison's yard?

- (A) $35\frac{1}{4}$ ft
- (B) $36\frac{1}{2}$ ft
- (C) $37\frac{1}{4}$ ft
- (D) $37\frac{1}{2}$ ft

10. Jaelyn is making a patchwork quilt. Each patch is in the shape of a parallelogram. If each patch has a base of 5 inches and a height of 6 inches, what is the area in square inches of each patch?

- (F) 25 square inches
- (G) 26 square inches
- (H) 28 square inches
- (I) 30 square inches

Use the coordinate graph for Exercises 11 and 12.



11. Name the coordinates for point B.

- (A) (0,8)
- (B) (3,5)
- (C) (3,8)
- (D) (8,3)

12. Which point has the coordinates (8, 0)?

- (F) A
- (G) B
- (H) C
- (I) y



Extended-Response Test

Demonstrate your knowledge by giving a clear, concise solution to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another piece of paper.

1. In this chapter, you learned several ways to classify polygons and three-dimensional figures, such as triangles, quadrilaterals, prisms, and pyramids. How would you describe the figures below? Explain your reasoning.

a. regular hexagon

b. tissue box

2. Explain, in words and symbols, how to find the measurements below.

a. volume of a paper bag with a width of 6 inches, a base of 13 inches, and a height of 24 inches.

b. volume of 5 building blocks stacked on each other. Each block is 3 centimeters long, 1 centimeter wide, and 2 centimeter tall.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Show the student a triangular prism or draw one on the board.

Read each question aloud to the student. Then write the student's answers on the lines below the question.

1. How many faces does this figure have?

2. How many vertices does this figure have?

3. How many edges does this figure have?

4. What is this figure called?

5. How do you know what this figure is called?

Draw an equilateral triangle on the board.

6. How would you classify this triangle?

7. Draw an regular polygon.

Oral Assessment *(continued)*

Draw a rectangular prism on the board.

Read each question aloud to the student. Then write the student's answers on the lines below the question.

8. How many faces does this figure have?

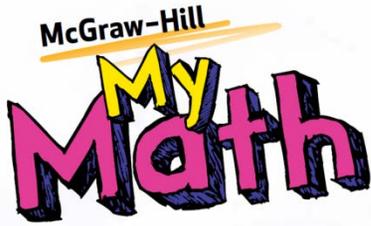
9. How many vertices does this figure have?

10. How many edges does this figure have?

11. What is this figure called, and how do you know what this figure is called?

12. How would you find the volume of this figure?

13. Use a ruler to find the figure's volume.



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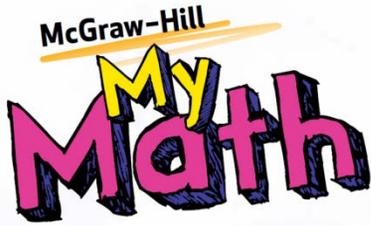
Chapter Assessment Question Correlation

Grade 5

Grade 5, Chapter 1: Place Value									
Question	Pretest	Check My Progress (Lessons 1-4)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.3b	5.NBT.3b	5.NBT.1	5.NBT.1	5.NBT.3a
2	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.3b	5.NBT.3b	5.NBT.1	5.NBT.1	5.NBT.1
3	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1
4	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.3a
5	5.NBT.3b	5.NBT.1	5.NBT.3b	5.NBT.3b	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1
6	5.NBT.3b	5.NBT.1	5.NBT.3b	5.NBT.3b	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1	5.NBT.1
7	5.NBT.3b	5.NBT.3b	5.NBT.3b	5.NBT.3b	5.NBT.3a	5.NBT.3a	5.NBT.3b	5.NBT.3b	5.NBT.1
8	5.NBT.3b	5.NBT.3b	5.NBT.1	5.NBT.1	5.NBT.3b	5.NBT.3b	5.NBT.3b	5.NBT.3b	5.NBT.3b
9	5.NBT.3a	5.NBT.3b	5.NBT.1	5.NBT.1	5.NBT.3b	5.NBT.3b	5.NBT.3b	5.NBT.3b	5.NBT.3b
10	5.NBT.3a	5.NBT.3b	5.NBT.3a	5.NBT.3a	5.NBT.3b	5.NBT.3b	5.NBT.3b	5.NBT.3b	5.NBT.1

Grade 5, Chapter 1: Place Value

Question	Pretest	Check My Progress (Lessons 1-4)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
11	5.NBT.3a	5.NBT.3b	5.NBT.3a	5.NBT.3a	5.NBT.3b	5.NBT.3b	5.NBT.1	5.NBT.1	5.NBT.3a
12	5.NBT.3a	5.NBT.3b	5.NBT.3a	5.NBT.3a	5.NBT.3	5.NBT.3	5.NBT.3a	5.NBT.3a	5.NBT.5
13	5.NBT.3a	5.NBT.3a	5.NBT.3	5.NBT.3	5.NBT.3	5.NBT.3	5.NBT.3b	5.NBT.3b	5.NBT.3
14	5.NBT.3a	5.NBT.3a	5.NBT.1	5.NBT.1	5.NBT.3	5.NBT.3	5.NBT.3b	5.NBT.3b	5.NBT.3
15	5.NBT.3a						5.NBT.3b	5.NBT.3b	
16							5.NBT.3b	5.NBT.3b	
17							5.NBT.3b	5.NBT.3b	
18							5.NBT.3	5.NBT.3	
19							5.NBT.3	5.NBT.3	
20							5.NBT.3	5.NBT.3	



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Chapter Assessment Question Correlation

Grade 5

Grade 5, Chapter 2: Multiply Whole Numbers									
Question	Pretest	Check My Progress (Lessons 1-5)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
1	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.5
2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2
3	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.2	5.NBT.5
4	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.2	5.NBT.5
5	5.NBT.2	5.NBT.2	5.NBT.5						
6	5.NBT.2	5.NBT.2	5.NBT.5						
7	5.NBT.5	5.NBT.2	5.NBT.5						
8	5.NBT.5	5.NBT.2	5.NBT.5						
9	5.NBT.5	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.5
10	5.NBT.5	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.5

Grade 5, Chapter 2: Multiply Whole Numbers

Question	Pretest	Check My Progress (Lessons 1-5)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
11	5.NBT.5		5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.5
12	5.NBT.5		5.NBT.5	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.2
13	5.NBT.5		5.NBT.5						
14	5.NBT.5		5.NBT.2	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.2
15	5.NBT.5		5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.5	5.NBT.2	5.NBT.2	5.NBT.5
16			5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.2	5.NBT.2
17			5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.2	
18			5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.5	5.NBT.5	
19					5.NBT.2	5.NBT.2	5.NBT.5	5.NBT.5	
20					5.NBT.2	5.NBT.2	5.NBT.5	5.NBT.5	
21							5.NBT.5	5.NBT.5	
22							5.NBT.5	5.NBT.5	
23							5.NBT.2	5.NBT.2	

Grade 5, Chapter 3: Divide a by One-Digit Divisor

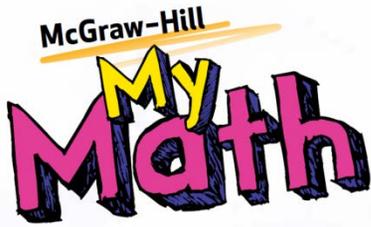
Question	Pretest	Check My Progress (Lessons 1-4)	Check My Progress (Lessons 5-8)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice	Benchmark Test 1 (Chapters 1-3)
1	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.5
2	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.OA.3
3	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.5
4	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6		5.NBT.6
5	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6		5.NBT.3b
6	5.NBT.6		5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6		5.NBT.2
7	5.NBT.6		5.NBT.6			5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6		5.NBT.6
8	5.NBT.6		5.NBT.6			5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6		5.NBT.3b
9	5.NBT.6		5.NBT.6			5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6		5.NBT.5
10								5.NBT.6	5.NBT.6		5.NBT.3a

Grade 5, Chapter 4: Divide by a Two-Digit Divisor

Question	Pretest	Check My Progress (Lessons 1-3)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
11	5.NBT.6		5.NBT.6						
12	5.NBT.6		5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	
13	5.NBT.6		5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	
14	5.NBT.6				5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	
15	5.NBT.6				5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	
16	5.NBT.6				5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6	
17	5.NBT.6						5.NBT.6	5.NBT.6	
18	5.NBT.6						5.NBT.6	5.NBT.6	
19							5.NBT.6	5.NBT.6	
20							5.NBT.6	5.NBT.6	

Grade 5, Chapter 5: Add and Subtract Decimals

Question	Pretest	Check My Progress (Lessons 1-3)	Check My Progress (Lessons 4-7)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
11	5.NBT.7			5.NBT.7						
12	5.NBT.7			5.NBT.7						
13	5.NBT.7					5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.7	
14	5.NBT.7					5.NBT.7	5.NBT.7	5.NBT.4	5.NBT.4	
15	5.NBT.7							5.NBT.4	5.NBT.4	
16								5.NBT.7	5.NBT.7	
17								5.NBT.7	5.NBT.7	
18								5.NBT.7	5.NBT.7	
19								5.NBT.7	5.NBT.7	
20								5.NBT.7	5.NBT.7	



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Chapter Assessment Question Correlation

Grade 5

Grade 5, Chapter 6: Multiply and Divide Decimals

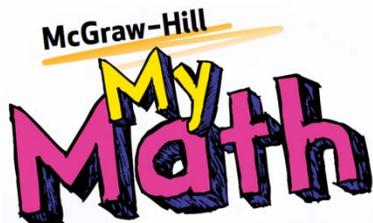
Question	Pretest	Check My Progress (Lessons 1-5)	Check My Progress (Lessons 6-9)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice	Benchmark Test 2 (Chapters 4-6)
1	5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.7	5.NBT.7	5.NBT.5	5.NBT.5	5.NBT.7	5.NBT.6
2	5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.7	5.NBT.7	5.NBT.5	5.NBT.5	5.NBT.7	5.NBT.7
3	5.NBT.6	5.NBT.5	5.NBT.2	5.NBT.6	5.NBT.6	5.NBT.2	5.NBT.2	5.NBT.5	5.NBT.5	5.NBT.6	5.NBT.7
4	5.NBT.6	5.NBT.5	5.NBT.2	5.NBT.7	5.NBT.7	5.NBT.2	5.NBT.2	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.2
5	5.NBT.7	5.NBT.7	5.NBT.6	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.2	5.NBT.6
6	5.NBT.7	5.NBT.7	5.NBT.2	5.NBT.7	5.NBT.7						
7	5.NBT.7	5.NBT.7	5.NBT.6	5.NBT.7	5.NBT.7	5.NBT.2	5.NBT.2	5.NBT.7	5.NBT.7	5.NBT.2	5.NBT.7
8	5.NBT.7	5.NBT.7	5.NBT.6	5.NBT.7	5.NBT.5						
9	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.2	5.NBT.2	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.4
10	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.2	5.NBT.2	5.NBT.7	5.NBT.7	5.NBT.2	5.NBT.2	5.NBT.7	5.NBT.2

Grade 5, Chapter 6: Multiply and Divide Decimals

Question	Pretest	Check My Progress (Lessons 1-5)	Check My Progress (Lessons 6-9)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice	Benchmark Test 2 (Chapters 4-6)
11	5.NBT.2	5.NBT.2		5.NBT.7	5.NBT.7	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.7	5.OA.3
12	5.NBT.2	5.NBT.2		5.NBT.5	5.NBT.5	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.2	5.NBT.7	5.NBT.7
13	5.NBT.2			5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.6	5.NBT.6		5.NBT.6
14	5.NBT.2			5.NBT.7	5.NBT.7	5.NBT.6	5.NBT.6	5.NBT.6	5.NBT.6		5.NBT.4
15	5.NBT.7					5.NBT.7	5.NBT.7	5.NBT.6	5.NBT.6		5.NBT.7
16	5.NBT.7					5.NBT.2	5.NBT.2	5.NBT.7	5.NBT.7		5.NBT.7
17						5.NBT.7	5.NBT.7	5.NBT.7	5.NBT.7		5.NBT.7
18								5.NBT.7	5.NBT.7		5.NBT.4
19								5.NBT.7	5.NBT.7		5.NBT.5
20								5.NBT.2	5.NBT.2		5.NBT.7
21								5.NBT.2	5.NBT.2		
22								5.NBT.2	5.NBT.2		
23								5.NBT.2	5.NBT.2		
24								5.NBT.7	5.NBT.7		
25								5.NBT.7	5.NBT.7		
26								5.NBT.7	5.NBT.7		
27								5.NBT.7	5.NBT.7		
28								5.NBT.7	5.NBT.7		
29								5.NBT.7	5.NBT.7		

Grade 5, Chapter 7: Expressions and Patterns

Question	Pretest	Check My Progress (Lessons 1-4)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
11	5.G.1		5.OA.1	5.OA.1	5.OA.3	5.OA.3	5.OA.1	5.OA.1	5.G.1
12	5.G.1		5.OA.1	5.OA.1	5.OA.1	5.OA.1	5.OA.3	5.OA.3	5.G.1
13	5.G.1		5.OA.1	5.OA.1	5.OA.1	5.OA.1	5.OA.1	5.OA.1	
14	5.OA.1		5.OA.2	5.OA.2	5.OA.1	5.OA.1	5.OA.3	5.OA.3	
15					5.OA.1	5.OA.1	5.G.2	5.G.2	
16					5.OA.1	5.OA.1	5.G.1	5.G.1	
17					5.OA.2	5.OA.2	5.OA.1	5.OA.1	
18							5.OA.1	5.OA.1	
19							5.OA.1	5.OA.1	
20							5.OA.1	5.OA.1	

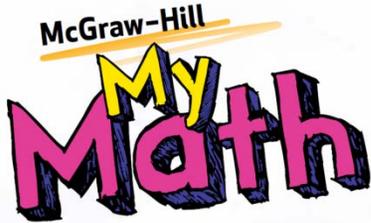


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Chapter Assessment Question Correlation

Grade 5

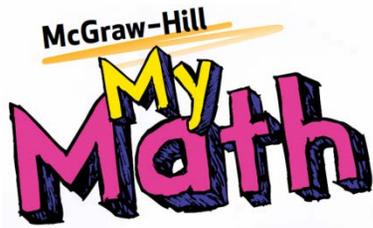
Grade 5, Chapter 8: Fractions and Decimals									
Question	Pretest	Check My Progress (Lessons 1-4)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
1	5.NF.2	5.NF.3	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NBT.6
2	5.NF.2	5.NF.3	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NBT.6
3	5.NF.2	5.NF.3	5.NF.5b	5.NF.5b	5.NF.2	5.NF.2	5.NF.5b	5.NF.5b	5.NBT.7
4	5.NF.2	5.NF.3	5.NF.2	5.NF.2	5.NF.5b	5.NF.5b	5.NF.5b	5.NF.5b	5.NBT.7
5	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.5b	5.NF.5b	5.NF.5b
6	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.5b	5.NF.5b	5.NF.3
7	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.5b	5.NF.5b	5.NF.2
8	5.NF.5b	5.NF.2	5.NF.5b	5.NF.5b	5.NF.2	5.NF.2	5.NF.5b	5.NF.5b	5.NF.2
9	5.NF.5b	5.NF.5b	5.NF.5b	5.NF.5b	5.NF.5b	5.NF.5b	5.NF.2	5.NF.2	5.NF.2
10	5.NF.2	5.NF.5b	5.NF.5b	5.NF.5b	5.NF.5b	5.NF.5b	5.NF.2	5.NF.2	5.NF.5b
11	5.NF.2	5.NF.5b	5.NF.3	5.NF.3	5.NF.5b	5.NF.5b	5.NF.2	5.NF.2	5.OA.3
12	5.NF.5b	5.NBT.5			5.NF.5b	5.NF.5b	5.NF.2	5.NF.2	5.NF.5b
13	5.NF.5b				5.NF.5b	5.NF.5b	5.NF.5b	5.NF.5b	
14	5.NF.5b				5.NF.3	5.NF.3	5.NF.5b	5.NF.5b	
15	5.NF.5b						5.NF.3	5.NF.3	
16							5.NF.5b	5.NF.5b	



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Chapter Assessment Question Correlation
Grade 5

Grade 5, Chapter 9: Add and Subtract Decimals

Question	Pretest	Check My Progress (Lessons 1-5)	Check My Progress (Lessons 6-9)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice	Benchmark Test 3 (Chapters 7-9)
1	5.NF.2	5.NF.2	5.NF.1	5.NF.2	5.NF.2	5.NF.1	5.NF.1	5.NF.1	5.NF.1	5.NBT.6	5.NF.5b
2	5.NF.2	5.NF.2	5.NF.1	5.NF.1	5.NF.1	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.OA.1
3	5.NF.1	5.NF.2	5.NF.1	5.NF.2	5.NF.2	5.NF.1	5.NF.1	5.NF.2	5.NF.2	5.NF.1	5.NF.1
4	5.NF.2	5.NF.2	5.NF.2	5.NF.1	5.NF.1	5.NF.2	5.NF.2	5.NF.1	5.NF.1	5.NBT.7	5.G.2
5	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.1	5.NF.2	5.NF.2	5.NF.2
6	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.1	5.NF.2	5.NF.2	5.NF.2
7	5.NF.2	5.NF.1	5.NF.2	5.NF.1	5.NF.2	5.NF.2	5.NF.2	5.NF.2	5.NF.1	5.NF.2	5.OA.2
8	5.NF.2	5.NF.1	5.NF.2	5.NF.2	5.NF.1	5.NF.1	5.NF.1	5.NF.2	5.NF.2	5.NF.2	5.NF.5b
9	5.NF.2	5.NF.1	5.NF.2	5.NF.2	5.NF.1	5.NF.2	5.NF.2	5.NF.1	5.NF.1	5.NF.2	5.OA.1
10	5.NF.2	5.NF.2	5.NF.1	5.NF.2	5.NF.2	5.NF.1	5.NF.1	5.NF.1	5.NF.1	5.NBT.6	5.NF.5b



McGraw-Hill My Math

**Chapter Assessment Question Correlation
Grade 5**

Grade 5, Chapter 10: Multiply and Divide Fractions										
Question	Pretest	Check My Progress (Lessons 1-4)	Check My Progress (Lessons 5-8)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
1	5.NF.4	5.NF.4a	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.OA.1
2	5.NF.4	5.NF.4a	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.2
3	5.NF.4	5.NF.4a	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NF.4	5.NBT.7
4	5.NF.4	5.NF.4a	5.NF.4	5.NF.4	5.NF.4	5.NF.6	5.NF.6	5.NF.4	5.NF.4	5.NF.4
5	5.NF.4	5.NF.6	5.NF.4	5.NF.6	5.NF.6	5.NF.6	5.NF.6	5.NF.4	5.NF.4	5.NBT.7
6	5.NF.4	5.NF.4	5.NF.6	5.NF.6	5.NF.6	5.NF.6	5.NF.6	5.NF.6	5.NF.6	5.NF.2
7	5.NF.6	5.NF.4	5.NF.6	5.NF.7b	5.NF.7b	5.NF.6	5.NF.6	5.NF.6	5.NF.6	5.OA.3
8	5.NF.6	5.NF.4	5.NF.6	5.NF.7a	5.NF.7a	5.NF.7b	5.NF.7b	5.NF.6	5.NF.6	5.NBT.6
9	5.NF.7b	5.NF.4	5.NF.6	5.NF.7a	5.NF.7a	5.NF.7b	5.NF.7b	5.NF.6	5.NF.6	5.NF.2
10	5.NF.7b	5.NF.4	5.NF.6	5.NF.7c	5.NF.7c	5.NF.7b	5.NF.7b	5.NF.6	5.NF.6	5.NBT.6

Grade 5, Chapter 10: Multiply and Divide Fractions

Question	Pretest	Check My Progress (Lessons 1-4)	Check My Progress (Lessons 5-8)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
11	5.NF.7a		5.NF.6	5.NF.7c	5.NF.7c	5.NF.7a	5.NF.7a	5.NF.7b	5.NF.7b	5.NF.1
12	5.NF.7a		5.NF.6			5.NF.7a	5.NF.7a	5.NF.7b	5.NF.7b	5.OA.2
13						5.NF.7c	5.NF.7c	5.NF.7b	5.NF.7a	
14						5.NF.7c	5.NF.7c	5.NF.7a	5.NF.7a	
15								5.NF.7b	5.NF.7b	
16								5.NF.7a	5.NF.7a	
17								5.NF.7b	5.NF.7b	
18								5.NF.7a	5.NF.7a	
19								5.NF.7c	5.NF.7c	
20								5.NF.7c	5.NF.7c	

Grade 5, Chapter 11 : Measurement

Question	Pretest	Check My Progress (Lessons 1-5)	Check My Progress (Lessons 6-10)	Chapter Test Form 1A	Chapter Test Form 1B	Chapter Test Form 2A	Chapter Test Form 2B	Chapter Test Form 3A	Chapter Test Form 3B	Standardized Test Practice
11	5.MD.1			5.MD.1	5.MD.1	5.MD.2	5.MD.2	5.MD.1	5.MD.1	5.MD.1
12	5.MD.1			5.MD.2	5.MD.2	5.MD.1	5.MD.1	5.MD.1	5.MD.1	5.MD.1
13	5.MD.1					5.MD.1	5.MD.1	5.MD.1	5.MD.1	
14	5.MD.1					5.MD.1	5.MD.1	5.MD.1	5.MD.1	
15	5.MD.2							5.MD.1	5.MD.1	
16	5.MD.1							5.MD.1	5.MD.1	

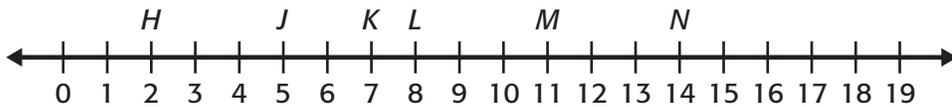
Am I Ready?

Practice

Write each number in word form.

1. 7 **seven** _____
2. 4 **four** _____
3. 21 **twenty-one** _____
4. 35 **thirty-five** _____
5. 112 **one hundred twelve** _____
6. 228 **two hundred twenty-eight** _____
7. 504 **five hundred four** _____
8. 460 **four hundred sixty** _____

Write the number that represents each point on the number line.



- | | |
|----------------------|-----------------------|
| 9. M 11 _____ | 10. H 2 _____ |
| 11. K 7 _____ | 12. N 14 _____ |
| 13. J 5 _____ | 14. L 8 _____ |

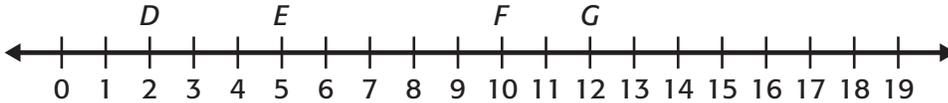
Write each sentence using the symbols $<$, $>$, or $=$.

- | | |
|---|--|
| 15. 3 is less than 7 $3 < 7$ | 16. 42 is greater than 39 $42 > 39$ |
| 17. 5 is equal to 5 $5 = 5$ | 18. 218 is greater than 202 $218 > 202$ |

Am I Ready?

Review

Write the number that represents each point on the number line.



There are four points on the number line, *D*, *E*, *F*, and *G*.

Locate each point.

Then write the number that corresponds to each point.

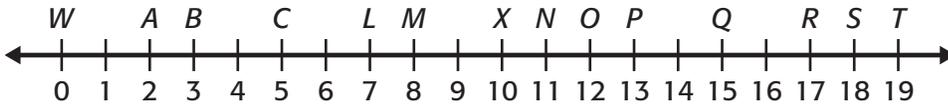
Point *D* is located at the number 2.

Point *E* is located at the number 5.

Point *F* is located at the number 10.

Point *G* is located at the number 12.

Write the number that represents each point on the number line.



- | | |
|------------------------|------------------------|
| 1. <i>S</i> <u>18</u> | 2. <i>C</i> <u>5</u> |
| 3. <i>N</i> <u>11</u> | 4. <i>A</i> <u>2</u> |
| 5. <i>T</i> <u>19</u> | 6. <i>P</i> <u>13</u> |
| 7. <i>M</i> <u>8</u> | 8. <i>B</i> <u>3</u> |
| 9. <i>R</i> <u>17</u> | 10. <i>L</i> <u>7</u> |
| 11. <i>O</i> <u>12</u> | 12. <i>Q</i> <u>15</u> |
| 13. <i>W</i> <u>0</u> | 14. <i>X</i> <u>10</u> |

Am I Ready?

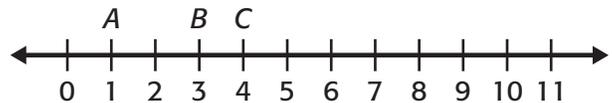
Apply

Solve.

1. Mr. Levenstein, Mrs. Padgett, and Mrs. Sheeley all teach fifth grade science. Mr. Levenstein has 26 students, Mrs. Padgett has 24 students, and Mrs. Sheeley has 29 students. Write *29 is greater than 26* using symbols.

$$\underline{29 > 26}$$

2. The ages in years of the Bixler family children are represented on the number line below. The point *A* represents Abigail's age. The point *B* represents Bradley's age. The point *C* represents Charlotte's age. How old is Bradley?



3 years old

3. The number of miles that three people ran on Monday is represented on the number line below. The point *M* represents the number of miles Martin ran. The point *N* represents the number of miles Nina ran. The point *P* represents the number of miles Paloma ran. How many miles did Nina run?



6 mi

4. The table gives the number of pets that four friends have. Write *3 is less than 5* using symbols.

Friend	Number of Pets
Damon	3
Felisa	2
Kristin	0
Tyrone	5

$$\underline{3 < 5}$$

5. A bakery made 144 banana nut muffins and 72 blueberry muffins. Write *144 is greater than 72* using symbols.

$$\underline{144 > 72}$$

6. Regina sent 42 text messages during the month of March. She sent 51 text messages during the month of April. Write *42 is less than 51* using symbols.

$$\underline{42 < 51}$$

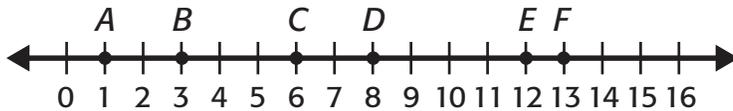
Diagnostic Test

Write each number in word form.

1. 6
2. 18
3. 34
4. 41
5. 150
6. 271

1. **six**
2. **eighteen**
3. **thirty-four**
4. **forty-one**
5. **one hundred**
 fifty
6. **two hundred**
 seventy-one

Write the value of each point on the number line.



7. A
8. F
9. B
10. D
11. C
12. E

7. **1**
8. **13**
9. **3**
10. **8**
11. **6**
12. **12**

Write each sentence using the symbols $<$, $>$, or $=$.

13. 5 is less than 9
14. 41 is greater than 12
15. 92 is equal to 92
16. 231 is greater than 230
17. Sandy collected 16 seashells. Mark collected 14 seashells.
Write *14 is less than 16* using symbols.

13. **5 < 9**
14. **41 > 12**
15. **92 = 92**
16. **231 > 230**
17. **14 < 16**

Pretest

Name the value of the underlined digit.

1. 1,567,944

2. 13,489,012

3. 699,879

4. 4,017,526

1. 40

2. 80,000

3. 9,000

4. 4,000,000

Replace each ● with <, >, or = to make a true sentence.

5. 9,013 ● 9,301

6. 23,529 ● 23,528

7. 0.08 ● 0.080

8. 6.29 ● 6.33

5. <

6. >

7. =

8. <

Write each fraction as a decimal.

9. $\frac{683}{1,000}$

10. $\frac{7}{10}$

11. $\frac{6}{100}$

12. $\frac{91}{100}$

13. $\frac{21}{1,000}$

14. $\frac{327}{1,000}$

15. $\frac{49}{100}$

9. 0.683

10. 0.7

11. 0.06

12. 0.91

13. 0.021

14. 0.327

15. 0.49

Check My Progress *(Lessons 1 through 4)*

Name the place of the underlined digit. Then write the value of the digit.

- 5,014,245
- 2,137
- 823,451
- Write fifty-six thousand, four hundred eleven in standard form.
- Write nine million, two hundred thousand, one hundred five in expanded form.
- Write 672,199 in expanded form.

- hundreds; 200
- thousands; 2,000
- tens; 50
- 56,411
- $9 \times 1,000,000 + 2 \times 100,000 + 1 \times 100 + 5 \times 1$
- $6 \times 100,000 + 7 \times 10,000 + 2 \times 1,000 + 1 \times 100 + 9 \times 10 + 9 \times 1$

Compare. Use $>$, $<$, or $=$.

- 984,120 _____ 984,210
- 415,183,289 _____ 418,012,284
- 1,833,129 _____ 1,387,904

- $<$
- $<$
- $>$
- 53,105;
53,400;
54,129;
54,131

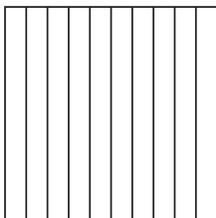
Order the numbers from *least to greatest*.

- 54,129; 53,105; 53,400; 54,131
- 10,285,531; 10,114,982; 10,300,185; 10,285,921
- 677,533; 676,800; 676,249; 676,531

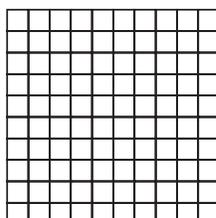
- 10,114,982;
10,285,531;
10,285,921;
10,300,185
- 676,249;
676,531;
676,800;
677,533

Shade the model. Then write each fraction in word form and as a decimal.

13. $\frac{4}{10}$



14. $\frac{55}{100}$



- Ex 13-14, See students' work.**
- four tenths; 0.4
 - fifty-five hundredths; 0.55

Vocabulary Test

Use the word list to complete each of the statements. Then give an example of each word.

1. Decimals that have the same value are equivalent
decimals.

Example:

See students' work.

2. place value is a system for writing numbers. In this system, the position of a digit determines its value.

Example:

See students' work.

3. The usual or common way to write a number is called standard form.

Example:

See students' work.

4. A whole number is any one of the numbers 0, 1, 2, 3...

Example:

See students' work.

5. The way of writing a number as the sum of the *values* of its digits is called expanded form.

Example:

See students' work.

6. A decimal is a number that has a digit in the tenths place, hundredths place, and beyond.

Example: See students' work.

Word List	
decimal	place value
equivalent decimals	standard form
expanded form	whole number

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of 4 in 4,132?
A. 4,000 B. 400 C. 40 D. 4 1. **A**
2. What is the value of 1 in 1,984,132?
F. 1,000,000 G. 100,000 H. 100 I. 10 2. **F**
3. What is the value of 9 in 98,750?
A. 900,000 B. 90,000 C. 9,000 D. 900 3. **B**
4. The speed of light is about *one hundred eighty-six thousand* miles per second. What is this number written in standard form?
F. 18,600 H. 1,860,000 4. **G**
G. 186,000 I. 18,600,000
5. Which number makes a true number sentence in _____ $>$ 6,567?
A. 6,657 B. 5,657 C. 5,765 D. 6,557 5. **A**
6. Which number makes a true number sentence in _____ $<$ 0.011?
F. 0.009 G. 0.011 H. 0.100 I. 0.110 6. **F**
7. Which number makes a true number sentence in _____ $=$ 298.660?
A. 289.660 B. 289.66 C. 298.600 D. 298.66 7. **D**
8. What is *four thousand, five hundred sixty-two* written in standard form?
F. 456 G. 4,562 H. 40,562 I. 400,562 8. **G**

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of 7 in 6,723?
 A. 7,000 B. 700 C. 70 D. 7 1. **B**

2. What is the value of 3 in 1,984,132?
 F. 3,000,000 G. 300,000 H. 300 I. 30 2. **I**

3. What is the value of 5 in 98,750?
 A. 5,000 B. 500 C. 50 D. 5 3. **C**

4. The distance to Saturn is about 821,000,000 miles.
 What is this number written in words?
 F. *eight hundred twenty-one thousand*
 G. *eight hundred twenty-one million*
 H. *eight hundred twenty-one billion*
 I. *eight hundred twenty-one trillion* 4. **G**

5. Which number makes a true number sentence in _____ $>$ 7,269?
 A. 7,629 B. 7,229 C. 7,169 D. 6,962 5. **A**

6. Which number makes a true number sentence in _____ $<$ 0.022?
 F. 0.009 G. 0.022 H. 0.200 I. 0.220 6. **F**

7. Which number makes a true number sentence in _____ $=$ 384.660?
 A. 384.06 B. 384.066 C. 384.600 D. 384.660 7. **D**

8. What is *two thousand, nine hundred eighty-one* written in standard form?
 F. 291 G. 2,981 H. 20,981 I. 200,981 8. **G**

Chapter Test, Form 1B *(continued)*

9. What is *six million, seven hundred sixty-two thousand, one hundred twelve* written in standard form?

A. 2,012

C. 6,726,112

B. 676,112

D. 6,762,112

9. **D**

10. How is $\frac{3}{10}$ written as a decimal?

F. 0.003

G. 0.300

H. 0.030

I. 3.000

10. **G**

11. How is $\frac{16}{1,000}$ written as a decimal?

A. 16.000

B. 1.600

C. 0.160

D. 0.016

11. **D**

12. Mrs. Martinez bought 0.7 pound of turkey. What is this decimal written in word form?

F. seven

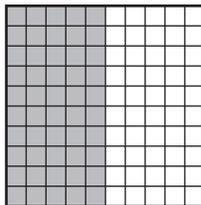
H. seven hundredths

G. seven tenths

I. seven thousandths

12. **G**

13. What part of the model is shaded?



A. 0.005

B. 0.05

C. 0.5

D. 5.0

13. **C**

14. What is the expanded form of 392,105?

F. $3 \times 100,000 + 9 \times 10,000 + 2 \times 1,000 + 1 \times 100 + 5 \times 10$

G. $3 \times 100,000 + 9 \times 10,000 + 2 \times 1,000 + 1 \times 100 + 5 \times 1$

H. $3 \times 100,000 + 9 \times 1,000 + 2 \times 100 + 1 \times 10 + 5 \times 1$

I. $3 \times 10,000 + 9 \times 10,000 + 2 \times 1,000 + 1 \times 100 + 5 \times 1$

14. **G**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which of the following shows the numbers ordered from *least to greatest*?
0.302, 0.32, 0.106, 0.160, 0.3
 A. 0.32, 0.3, 0.302, 0.160, 0.106
 B. 0.106, 0.160, 0.3, 0.302, 0.32
 C. 0.106, 0.160, 0.302, 0.32, 0.3
 D. 0.160, 0.106, 0.3, 0.302, 0.3
 1. **B**

2. Which of the following shows the numbers ordered from *least to greatest*?
9,345,287; 92,239,939; 87,623,176; 112,224,981
 F. 112,224,981; 87,623,176; 9,345,287; 92,239,939
 G. 87,623,176; 9,345,287; 92,239,939; 1,012,224,981
 H. 112,224,981; 92,239,939; 87,623,176; 9,345,287
 I. 9,345,287; 87,623,176; 92,239,939; 112,224,981
 2. **I**

3. What is *six thousand, two hundred thirty-four* written in standard form?
 A. 60,254 B. 6,254 C. 6,234 D. 623
 3. **C**

4. What is *three million, one hundred twenty-one thousand, four hundred fifty-one* written in standard form?
 F. 3,121,451 H. 31,214
 G. 312,151 I. 3,451
 4. **F**

5. What is the value of the underlined digit in 345,102?
 A. 5 B. 50 C. 500 D. 5,000
 5. **D**

6. What is the value of the underlined digit in 6,381,256?
 F. 80,000 G. 8,000 H. 800 I. 80
 6. **F**

7. How is the fraction $\frac{39}{100}$ written as a decimal?
 A. 0.039 B. 0.39 C. 0.0039 D. 3.9
 7. **B**

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

Use the table to answer Exercises 8 through 11.

Great Lakes		
Name	Size	Depth
Lake Erie	9,940 sq miles	62 ft
Lake Huron	23,010 sq miles	195 ft
Lake Michigan	22,400 sq miles	279 ft
Lake Ontario	7,540 sq miles	283 ft
Lake Superior	31,820 sq miles	483 ft

8. Which Great Lake is the greatest in size?

8. Lake Superior

9. Which Great Lake is the deepest?

9. Lake Superior

10. Which Great Lake is the smallest in size?

10. Lake Ontario

11. Which Great Lake is most shallow?

11. Lake Erie

Use the four-step plan to solve each problem.

12. Lynn can walk two miles in 24 minutes. At this rate, how long will it take her to walk 6 miles?

12. 72 minutes

13. The Glendale Plaza Building in Glendale, California, is 353 feet tall. The U.S. Bank Tower in Los Angeles, California, is 1,017 feet tall. Which building is taller?

13. U.S. Bank Tower

14. After going on vacation, Mandy came home with \$5. She spent \$6 on a pair of sunglasses, \$10 on snacks, \$4 on a book, and \$5 on arcade games. How much money did Mandy start with?

14. \$30

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which of the following shows the numbers ordered from *least to greatest*?
0.602, 0.62, 0.206, 0.260, 0.6
 A. 0.62, 0.6, 0.602, 0.260, 0.206
 B. 0.206, 0.260, 0.602, 0.6, 0.62
 C. 0.206, 0.260, 0.6, 0.602, 0.62
 D. 0.6, 0.62, 0.602, 0.206, 0.260
 1. **C**

2. Which of the following shows the numbers ordered from *least to greatest*?
890,409; 890,904; 809,904; 809,940
 F. 809,904; 809,940; 890,409; 890,904
 G. 809,904; 890,409; 809,940; 890,904
 H. 809,940; 809,904; 890,409; 890,904
 I. 890,904; 890,409; 809,940; 809,904
 2. **F**

3. What is *nine thousand, seven hundred twenty-five* written in standard form?
 A. 925 B. 975 C. 9,725 D. 9,275
 3. **C**

4. What is *twenty million, two hundred thirty-four thousand, eight hundred seventy-six* written in standard form?
 F. 20,234,876 H. 20,243,876
 G. 20,432,867 I. 20,234,867
 4. **F**

5. What is the value of the underlined digit in 29,478?
 A. 20,000 B. 2,000 C. 200 D. 20
 5. **A**

6. What is the value of the underlined digit in 2,173,684?
 F. 60,000 G. 6,000 H. 600 I. 60
 6. **H**

7. How is the fraction $\frac{2}{10}$ written as a decimal?
 A. 0.02 B. 0.2 C. 0.002 D. 2.0
 7. **B**

Chapter Test, Form 2B *(continued)*

Read each question carefully. Write your answer on the line provided.

Use the table to answer Exercises 8 through 11.

Seas		
Name	Size	Depth
Red Sea	17,200 sq miles	1,608 ft
Aegean Sea	82,625 sq miles	11,624 ft
Dead Sea	462 sq miles	1,083 ft
Black Sea	168,495 sq miles	7,200 ft

8. Which sea is the greatest in size?

8. Black Sea

9. Which sea is the deepest?

9. Aegean Sea

10. Which sea is the smallest in size?

10. Dead Sea

11. Which sea is most shallow?

11. Dead Sea

Use the four-step plan to solve each problem.

12. Angel can walk three miles in 40 minutes. At this rate, how long will it take her to walk 6 miles?

12. 80 minutes

13. The three highest mountains in Colorado are Mount Massive (14,421 ft), Mount Harvard (14,420 ft), and Mount Elbert (14,433 ft). Which mountain has the greatest height?

13. Mount Elbert

14. After shopping for school supplies, Martin came home with \$4. He bought a pack of pens for \$6, a calculator for \$12, and a notebook for \$3. How much money did he start with?

14. \$25

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Write the value of the underlined digit.

1. 945,249

1. 900,000

2. 54,890,721

2. 4,000,000

3. 624,943,567

3. 600,000,000

4. 136,720,945

4. 20,000

5. Write the value of 8 in the number 829,376.

5. 800,000

6. Write the value of 5 in the number 2,095.

6. 5

Replace each _____ with $<$, $>$, or $=$ to make a true sentence.

7. 15,014 _____ 15,004

7. >

8. 4,639 _____ 4,638

8. >

9. 0.70 _____ 0.700

9. =

10. 24.106 _____ 24.316

10. <

11. The distance to Saturn is about 821,000,000 miles.
Write this number in words.

11. eight hundred
twenty-one
million

12. Write $\frac{16}{1,000}$ as a decimal.

12. 0.016

Chapter Test, Form 3A *(continued)*

Use the table to answer Exercises 13 through 17.

Size of the Planets (diameter)	
Name	Size
Earth	12,756 km
Mercury	4,880 km
Jupiter	142,740 km
Saturn	120,034 km
Venus	12,104 km

13. Which planet is greatest in size?

13. Jupiter

14. Which planet is smallest in size?

14. Mercury

15. Order the planets from smallest to largest.

15. Mercury, Venus,
Earth, Saturn,
Jupiter

16. Is the size of Earth and Venus combined greater than the size of Saturn? Explain.

16. No, the combined size
is 24,860 kilometers.
This is less than
120,034 kilometers.

17. Is the size of Earth greater than or less than the size of Venus?

17. greater than

18. Dallas' Renaissance Tower is 886 feet, Bank of America Plaza is 921 feet, and Bank One Center is 787 feet. List the buildings from shortest to tallest.

18. Bank One Center,
Renaissance Tower,
Bank of America
Plaza

19. The Delgados are buying a pool that is 10 feet \times 10 feet for \$1,188. They plan to pay in 12 equal payments. Find the amount of each payment.

19. \$99

20. Julio increases the laps he runs by three laps each day. If he begins on Monday by running 4 laps, how many laps will he run on Wednesday at his current rate?

20. 10 laps

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Write the value of the underlined digit.

- | | |
|--|---------------------|
| 1. <u>6</u> 31,903 | 1. <u>600,000</u> |
| 2. <u>7</u> 2,165,882 | 2. <u>2,000,000</u> |
| 3. 4,6 <u>5</u> 2,573 | 3. <u>2,000</u> |
| 4. 125,308, <u>7</u> 23 | 4. <u>700</u> |
| 5. Write the value of 9 in the number 829,376. | 5. <u>9,000</u> |
| 6. Write the value of 2 in the number 2,095. | 6. <u>2,000</u> |

Replace each _____ with $<$, $>$, or $=$ to make a true sentence.

- | | |
|---|---------------------------------|
| 7. 1,358 _____ 1,538 | 7. <u>$<$</u> |
| 8. 15,571 _____ 15,570 | 8. <u>$>$</u> |
| 9. 0.15 _____ 0.105 | 9. <u>$>$</u> |
| 10. 2.925 _____ 2.9250 | 10. <u>$=$</u> |
| 11. The sun is 93,000,000 miles away. What is this number in words? | 11. <u>ninety-three million</u> |
| 12. Write $\frac{55}{100}$ as a decimal. | 12. <u>0.55</u> |

Chapter Test, Form 3B *(continued)*

Use the table to answer Exercises 13 through 17.

Size of the Planets (diameter)	
Name	Size
Earth	12,756 km
Mars	6,788 km
Neptune	49,620 km
Uranus	51,152 km

13. Which planet is greatest in size? **13. Uranus**
14. Which planet is smallest in size? **14. Mars**
15. Order the planets from smallest to largest. **15. Mars, Earth,
Neptune,
Uranus**
16. About how much larger is Earth than Mars? **16. about twice
as large**
17. Is the size of Earth greater than or less than the size of Neptune? **17. less than**
18. There are three long tunnels that go under Boston Harbor. The Sumner Tunnel is 5,653 feet long. The Callahan Tunnel is 5,070 feet long. The Ted Williams Tunnel is 8,448 feet long. List the tunnels from shortest to longest. **18. Callahan Tunnel,
Sumner Tunnel,
Ted Williams Tunnel**
19. The Delgados are buying a pool that is 22 feet \times 15 feet for \$6,744. They plan to pay in 12 equal payments. Find the amount of each payment. **19. \$562**
20. Julio increases the laps he runs by three laps each day. If he begins on Monday by running 5 laps, how many laps will he run on Wednesday at his current rate? **20. 11 laps**

Standardized Test Practice

Read each question. Then fill-in the correct answer.

- | | |
|--|---|
| <p>1. What is the expanded form of 340,729?</p> <p><input type="radio"/> (A) $3 \times 10,000 + 4 \times 1,000 + 7 \times 100 + 2 \times 10 + 9 \times 1$</p> <p><input type="radio"/> (B) $3 \times 100,000 + 4 \times 1,000 + 7 \times 100 + 2 \times 10 + 9 \times 1$</p> <p><input checked="" type="radio"/> (C) $3 \times 100,000 + 4 \times 10,000 + 7 \times 100 + 2 \times 10 + 9 \times 1$</p> <p><input type="radio"/> (D) $3 \times 10,000 + 4 \times 10,000 + 7 \times 100 + 2 \times 10 + 9 \times 1$</p> | <p>5. What is <i>seven hundred eighteen thousand, thirty-eight</i> in standard form?</p> <p><input type="radio"/> (A) 708,038</p> <p><input type="radio"/> (B) 708,830</p> <p><input type="radio"/> (C) 718,830</p> <p><input checked="" type="radio"/> (D) 718,038</p> |
| <p>2. In which number does 4 have a value of 40,000?</p> <p><input checked="" type="radio"/> (A) 345,629</p> <p><input type="radio"/> (B) 532,471</p> <p><input type="radio"/> (C) 429,376</p> <p><input type="radio"/> (D) 4,720,890</p> | <p>6. What is the value of 3 in 735,229,981?</p> <p><input checked="" type="radio"/> (A) 30,000,000</p> <p><input type="radio"/> (B) 300,000</p> <p><input type="radio"/> (C) 3,000,000</p> <p><input type="radio"/> (D) 30,000</p> |
| <p>3. The distance to the sun is about 93,000,000 miles. How is this number written in words?</p> <p><input type="radio"/> (A) <i>ninety-three thousand</i></p> <p><input checked="" type="radio"/> (B) <i>ninety-three million</i></p> <p><input type="radio"/> (C) <i>ninety-three billion</i></p> <p><input type="radio"/> (D) <i>ninety-three trillion</i></p> | <p>7. What is $2 \times 1,000 + 6 \times 100 + 5 \times 10 + 3 \times 1$ in standard form?</p> <p><input type="radio"/> (A) 2,065</p> <p><input type="radio"/> (B) 2,563</p> <p><input checked="" type="radio"/> (C) 2,653</p> <p><input type="radio"/> (D) 20,653</p> |
| <p>4. How is $\frac{7}{10}$ written as a decimal?</p> <p><input type="radio"/> (A) 7.0</p> <p><input checked="" type="radio"/> (B) 0.7</p> <p><input type="radio"/> (C) 0.07</p> <p><input type="radio"/> (D) 0.007</p> | <p>8. Which shows the numbers in order from <i>least</i> to <i>greatest</i>: 0.020, 0.022, 0.002, 0.202.</p> <p><input checked="" type="radio"/> (A) 0.002, 0.020, 0.022, 0.202</p> <p><input type="radio"/> (B) 0.202, 0.022, 0.020, 0.002</p> <p><input type="radio"/> (C) 0.002, 0.022, 0.020, 0.202</p> <p><input type="radio"/> (D) 0.202, 0.002, 0.020, 0.022</p> |

Standardized Test Practice *(continued)*

Read each question. Then fill-in the correct answer.

9. Which number results in a true sentence in $345 < \underline{\hspace{1cm}}$?

- (A) 343
- (B) 344
- (C) 345
- (D) 346

12. There are eight rolls of paper towels in one package. There are four packages of paper towels in one box. There are ten boxes. How many rolls of paper towels are there?

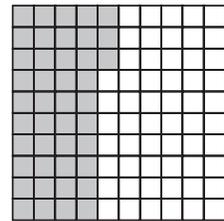
- (F) 32
- (G) 200
- (H) 300
- (J) 320

10. What is the word form of 1,504,200?

- (F) one million, four hundred five thousand, two hundred
- (G) one million, five hundred four thousand, two hundred
- (H) ten million, five hundred forty thousand, two hundred
- (I) one hundred thousand, five hundred four thousand, two hundred

13. Which fraction does the model represent?

- (A) $\frac{43}{10}$
- (B) $4\frac{3}{10}$
- (C) $\frac{43}{100}$
- (D) $4\frac{3}{100}$



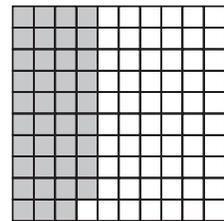
11. Landri ate 4 out of 10 grapes for a snack. Which decimal shows the number of grapes Landri ate?

- (A) 0.004
- (B) 0.04
- (C) 0.4
- (D) 4.0



14. Which decimal does the model represent?

- (F) 3.9
- (G) 3.09
- (H) 0.39
- (I) 0.039



Chapter Assessment Answer Key

Extended-Response Test, Page 28 *Sample Answers*

In addition to the scoring rubric found on page 29, the following sample answers may be used as guidance in evaluating open-ended assessment items.

- 1.** Understand. Be sure you understand the problem. What do you know? What do you need to find out. Plan: Plan a strategy for solving the problem. Solve: Use your plan to solve the problem. Check: Does the answer make sense?
- 2.** First line up the numbers. Then compare the digits in the greatest place. Then compare the digits in the next place.
- 3.** Find the value of each digit and add them together. $5 \times 1 + \left(3 \times \frac{1}{10}\right) + \left(1 \times \frac{1}{100}\right) + \left(2 \times \frac{1}{1,000}\right)$.

Extended-Response Rubric

Level	Specific Criteria
4	The student demonstrates a <i>thorough understanding</i> of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	The student demonstrates an <i>understanding</i> of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor errors that reflect inattentive execution of the mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	The student has demonstrated only a <i>partial understanding</i> of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	The student has demonstrated a <i>very limited understanding</i> of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is incomplete and exhibits many flaws. Although the student has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many errors or may be incomplete.
0	The student has provided a <i>completely incorrect</i> solution or uninterpretable response, or no response at all.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

Write the number 879,456,231 where the student can see it.

1. What is the value of the 5 in this number?

50,000

2. What is the place value of the 8 in this number?

hundred millions

3. Which number is in the ten millions place?

7

4. Tell how you got your answer.

Sample answer: I used place value.

Name _____ Date _____

Oral Assessment *(continued)*

Write the number 12.637 where the student can see it.

5. What is the value of the 7 in this number?

0.007

6. What is the place value of the 3 in this number?

hundredths

7. To order a set of numbers from greatest to least, what would you do?

Sample answer: I would look to see which number has the greatest number in the highest place value.

Am I Ready?

Practice

Write all of the factors of each number.

1. 12 1, 2, 3, 4, 6, 12

2. 13 1, 13

3. 10 1, 2, 5, 10

4. 25 1, 5, 25

5. 36 1, 2, 3, 4, 6, 9, 12, 18, 36

6. 22 1, 2, 11, 22

Write each repeated addition sentence as a multiplication sentence.

7. $5 + 5 + 5 = 15$

$3 \times 5 = 15$

8. $8 + 8 + 8 + 8 = 32$

$4 \times 8 = 32$

9. $11 + 11 = 22$

$2 \times 11 = 22$

10. $6 + 6 + 6 + 6 + 6 + 6 = 36$

$6 \times 6 = 36$

11. $12 + 12 + 12 = 36$

$3 \times 12 = 36$

12. $9 + 9 + 9 + 9 + 9 + 9 = 54$

$6 \times 9 = 54$

Multiply

13. $8 \times 3 =$ 24

14. $1 \times 12 =$ 12

15. $7 \times 9 =$ 63

16. $6 \times 10 =$ 60

17. Coach Evans purchased nine soccer balls for gym class for \$10 each. Find the total cost for all nine balls. \$90



Am I Ready?

Review

Multiply.

- | | |
|---|------------------------------------|
| 1. $4 \times 5 =$ | 1. <u> 20 </u> |
| 2. $6 \times 7 =$ | 2. <u> 42 </u> |
| 3. $11 \times 3 =$ | 3. <u> 33 </u> |
| 4. $7 \times 8 =$ | 4. <u> 56 </u> |
| 5. $4 \times 6 =$ | 5. <u> 24 </u> |
| 6. $5 \times 3 =$ | 6. <u> 15 </u> |
| 7. $6 \times 9 =$ | 7. <u> 54 </u> |
| 8. $9 \times 8 =$ | 8. <u> 72 </u> |
| 9. $10 \times 7 =$ | 9. <u> 70 </u> |
| 10. $9 \times 4 =$ | 10. <u> 36 </u> |
| 11. $9 \times 5 =$ | 11. <u> 45 </u> |
| 12. $5 \times 10 =$ | 12. <u> 50 </u> |
| 13. Kaylee read 12 books each month over the summer. How many books did she read in three months? | 13. <u> 36 books </u> |
| 14. Chase went to the movies with 4 friends. They each spent \$9. How much did they spend in all? | 14. <u> \$45 </u> |
| 15. Bella made 6 bracelets for her friends. She used 7 beads on each bracelet. How many beads did she use on all the bracelets? | 15. <u> 42 beads </u> |

Am I Ready?

Apply

Solve.

1. Felisa ran two miles on Monday, three miles on Tuesday, and one mile on Wednesday. If she runs the same number of miles for 5 weeks, how many total miles will she run?

30 miles

3. During the first year of a festival, there were 1,205 attendees. The second year, there were 180 more attendees than the first year. The third year, there were 500 more attendees than the second year. How many people attended the festival the third year?

1,885 people

5. A bookstore has discounted books for \$7 each. Joseph buys 3 books for his sister and 4 books for himself. How much does Joseph spend?

\$49

7. Tony made three dozen banana muffins. He gave 22 to his classmates and three to his sister. How many did he have left?

*Hint: 1 dozen = 12

11 muffins

2. Three friends went to see a movie. They each spent \$9 on the movie ticket and \$2 on a beverage. How much money altogether did they spend?

\$33

4. Marcus scored 15 points during his first basketball game. He scored twice as many points during his second basketball game. If he scored a total of 60 points during his first three basketball games, how many points did he score during his third basketball game?

15 points

6. Mr. Fraser drove 240 miles on Friday. On Saturday, he drove 180 miles. If he needs to drive a total of 600 miles by Sunday, how many miles does he need to drive on Sunday?

180 miles

8. Greg downloaded 11 songs on his MP3 player. Each song was 3 minutes long. How many minutes of music did Greg download?

33 minutes

Diagnostic Test

Write all of the factors of each number.

1. 12

2. 9

3. 16

4. 15

1. 1, 2, 3, 4, 6, 12

2. 1, 3, 9

3. 1, 2, 4, 8, 16

4. 1, 3, 5, 15

Multiply.

5. $9 \times 4 =$

6. $3 \times 10 =$

7. $5 \times 5 =$

8. $6 \times 8 =$

9. $1 \times 4 =$

10. $7 \times 9 =$

11. Find the total length of 4 pencils placed end to end if each pencil is 7 inches long.

5. 36

6. 30

7. 25

8. 48

9. 4

10. 63

11. 28 in.

Write each repeated addition sentence as a multiplication sentence.

12. $8 + 8 + 8 + 8 + 8 = 40$

13. $\$6 + \$6 + \$6 + \$6 = \$24$

14. $9 + 9 + 9 = 27$

15. There are 7 students sitting at each table in the cafeteria. How many students are sitting at 8 tables?

12. $5 \times 8 = 40$

13. $4 \times \$6 = \24

14. $3 \times 9 = 27$

15. $7 \times 8; 56 \text{ students}$

Pretest

Write the prime factorization of each number.

1. 63

1. $\underline{3 \times 3 \times 7}$

2. 32

2. $\underline{2 \times 2 \times 2 \times 2 \times 2}$

Write each product using an exponent.

3. $6 \times 6 =$

3. $\underline{6^2}$

4. $5 \times 5 \times 5 \times 5 =$

4. $\underline{5^4}$

Find each product mentally.

5. $8 \times 50 =$

5. $\underline{400}$

6. $330 \times 100 =$

6. $\underline{33,000}$

Rewrite each expression using the Distributive Property. Then evaluate.

7. $3 \times (40 + 4)$

7. $\underline{3(40) + 3(4); 132}$

8. $7 \times (20 + 8)$

8. $\underline{7(20) + 7(8); 196}$

Sample answer:

9. $\underline{30 \times 20 = 600}$

Sample answer:

10. $\underline{110 \times 40 = 4,400}$

Sample answer:

11. $\underline{30 \times 3 = 90}$

Sample answer:

12. $\underline{40 \times 10 = 400}$

Sample answer:

13. $\underline{110 \times 8 = 880}$

Sample answer:

14. $\underline{100 \times 50 = 5,000}$

Estimate by rounding. Show your work.

9. $33 \times 17 =$

10. $107 \times 41 =$

Estimate.

11. $27 \times 3 =$

12. $42 \times 14 =$

13. $108 \times 8 =$

14. $103 \times 52 =$

Make a table to solve.

15. For every batch of cookies Carla made, her brother ate 2 cookies. If Carla's brother ate a total of 6 cookies, how many batches of cookies did Carla make?

15. $\underline{3 \text{ batches}}$

Check My Progress *(Lessons 1 through 5)*

Write each power as a product of the same factor. Then find the value.

1. 10^2
2. 14^3
3. 7^2

1. $\underline{10 \times 10 = 100}$
2. $\underline{14 \times 14 \times 14 = 2,744}$
3. $\underline{7 \times 7 = 49}$

Find the prime factorization of each number using exponents.

4. 50
5. 560

4. $\underline{2 \times 5^2}$
5. $\underline{2^4 \times 5 \times 7}$

Find each product mentally.

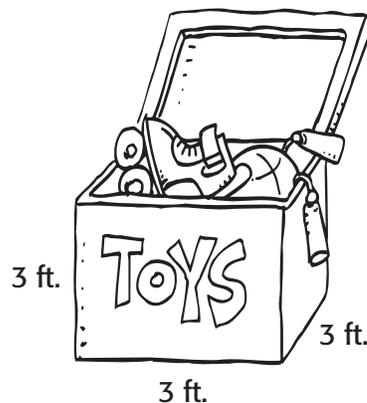
6. $60 \times 500 =$
7. $240 \times 10^2 =$
8. $96 \times 10^3 =$

6. $\underline{30,000}$
7. $\underline{24,000}$
8. $\underline{96,000}$

Solve.

9. Mr. Gabriel bought 10^2 packages of pens. Each package contains 15 pens. How many pens did he buy?
10. Andre is helping his father build a toy box for his little brother. The amount of space inside the toy box can be found by multiplying its width, length, and height. Write the amount of space, using an exponent. Then evaluate.

9. $\underline{1,500 \text{ pens}}$
10. $\underline{3\text{ft}^3 = 27 \text{ cubic ft}}$



Vocabulary Test

Match each word to its definition. Write your answers on the lines provided.

1. exponent **F**

2. product **G**

3. prime factorization **E**

4. cubed **A**

5. factor **C**

6. power **D**

7. Distributive Property **B**

8. Explain how a number can be a power of 10.

It is the result of using only 10 as a factor. For example:

A number like 10, 100, and 1,000.

A. A number raised to the third power.

B. The property that states that to multiply a sum by a number, you can multiply each addend by the same number and add the products.

C. A number that divides into a whole number evenly. Also, a number that is multiplied by another number.

D. A number obtained by raising a base number to an exponent.

E. A way of expressing a composite number as a product of its prime factors.

F. In a power, the number of times the base is used as a factor.

G. The answer to a multiplication problem.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the prime factorization of 24? 1. **A**
A. $2 \times 2 \times 2 \times 3$ **B.** $2 \times 2 \times 3$ **C.** 8×3 **D.** 6×4
2. What is the product of $10 \times 10 \times 10$, using an exponent? 2. **G**
F. 10^2 **G.** 10^3 **H.** 1,000 **I.** 10,000
3. What is the value of 100×6 ? Use mental math. 3. **C**
A. 6 **B.** 60 **C.** 600 **D.** 6,000
4. What is the value of $4 \times 2,000$? Use mental math. 4. **G**
F. 800 **G.** 8,000 **H.** 80,000 **I.** 800,000
5. Which is the best estimate of 6×22 by using rounding or compatible numbers? 5. **B**
A. 100 **B.** 120 **C.** 150 **D.** 180
6. Which is the best estimate of 23×52 by using rounding or compatible numbers? 6. **G**
F. 100 **G.** 1,000 **H.** 10,000 **I.** 100,000
7. Which is the best estimate of 104×7 by using rounding or compatible numbers? 7. **D**
A. 70 **B.** 500 **C.** 620 **D.** 700
8. What is the value of 54×3 ? 8. **I**
F. 57 **G.** 98 **H.** 150 **I.** 162
9. What is the value of 132×4 ? 9. **A**
A. 528 **B.** 400 **C.** 398 **D.** 136

Chapter Test, Form 1A (continued)

10. What is the value of 22×7 ? **10.** **G**
F. 136 G. 154 H. 168 I. 174
11. What is the value of 11×15 ? **11.** **A**
A. 165 B. 175 C. 185 D. 195
12. What is the value of 112×18 ? **12.** **H**
F. 1,162 G. 1,196 H. 2,016 I. 2,134
13. What is the value of 532×13 ? **13.** **D**
A. 2,128 B. 5,816 C. 6,619 D. 6,916
14. What is the value of 8×10^4 ? **14.** **F**
F. 80,000 G. 8,000 H. 800 I. 320
15. Barry has 103 model cars. Ryan has 2 times as many model cars. How many model cars does Ryan have? **15.** **C**
A. 52 B. 105 C. 206 D. 300
16. Carly uses 450 minutes each month on her cell phone. How many minutes will she use in 3 months? **16.** **I**
F. 900 G. 1,150 H. 1,225 I. 1,350
17. A hotel charges \$300 per room per week. How much did the hotel make if they rented 70 rooms for one week? **17.** **B**
A. \$210,000 B. \$21,000 C. \$2,100 D. \$210
18. Janie arranged chairs for a presentation. Each row contained 14 chairs and she arranged 22 rows. How many chairs were arranged? **18.** **G**
F. 322 G. 308 H. 294 I. 140

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the prime factorization of 75? 1. **B**
A. 3×25 C. 15×5
B. $3 \times 5 \times 5$ D. $3 \times 3 \times 5 \times 5$

2. What is the product of $7 \times 7 \times 7$, using an exponent? 2. **H**
F. 7^2 G. 343 H. 7^3 I. 49

3. What is the value of 50×12 ? Use mental math. 3. **B**
A. 6,000 B. 600 C. 60 D. 6

4. What is the value of 300×8 ? Use mental math. 4. **G**
F. 240 G. 2,400 H. 240,000 I. 24,000

5. Which is the best estimate of 5×33 by using rounding or compatible numbers? 5. **D**
A. 300 B. 200 C. 180 D. 150

6. Which is the best estimate of 11×68 by using rounding or compatible numbers? 6. **G**
F. 70 G. 700 H. 7,000 I. 70,000

7. Which is the best estimate of 249×2 by using rounding or compatible numbers? 7. **B**
A. 600 B. 500 C. 350 D. 300

8. What is the value of 19×6 ? 8. **H**
F. 94 G. 102 H. 114 I. 122

9. What is the value of 109×7 ? 9. **A**
A. 763 B. 743 C. 717 D. 687

Chapter Test, Form 1B (continued)**10.** What is the value of 43×8 ?

- F.**
- 386
- G.**
- 374
- H.**
- 356
- I.**
- 344

10. **I** **11.** What is the value of 65×14 ?

- A.**
- 830
- B.**
- 870
- C.**
- 910
- D.**
- 950

11. **C** **12.** What is the value of 3×10^3 ?

- F.**
- 300
- G.**
- 900
- H.**
- 999
- I.**
- 3,000

12. **I** **13.** What is the value of 751×9 ?

- A.**
- 5,057
- B.**
- 5,450
- C.**
- 6,759
- D.**
- 7,259

13. **C** **14.** What is the value of 30×440 ?

- F.**
- 12,250
- G.**
- 13,200
- H.**
- 15,100
- I.**
- 15,620

14. **G** **15.** Marco has 79 baseball cards. Hector has 4 times as many baseball cards. How many baseball cards does Hector have?

- A.**
- 316
- B.**
- 288
- C.**
- 226
- D.**
- 158

15. **A** **16.** Yolanda exercises for 360 minutes each week. How many minutes will she exercise in 5 weeks?

- F.**
- 1,550
- G.**
- 1,600
- H.**
- 1,650
- I.**
- 1,800

16. **I** **17.** An electrician earns \$950 per week. How much will the electrician earn in 3 weeks?

- A.**
- \$2,850
- B.**
- \$28,500
- C.**
- \$2,450
- D.**
- \$24,500

17. **A** **18.** Shenequa arranged chairs for a meeting. Each row contained 12 chairs and she arranged 6 rows. How many chairs were arranged?

- F.**
- 64
- G.**
- 72
- H.**
- 76
- I.**
- 82

18. **G**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of 80×50 ? Use mental math. 1. **A**
A. 4,000 **B.** 3,000 **C.** 400 **D.** 300

2. What is the value of $10 \times 4,000$? Use mental math. 2. **H**
F. 400 **G.** 4,000 **H.** 40,000 **I.** 400,000

3. Which is the best estimate of 8×22 by using rounding or compatible numbers? 3. **B**
A. 100 **B.** 200 **C.** 250 **D.** 300

4. Which is the best estimate of 22×97 by using rounding or compatible numbers? 4. **G**
F. 1,800 **G.** 2,000 **H.** 2,300 **I.** 2,400

5. What is the value of 115×9 ? 5. **C**
A. 905 **B.** 915 **C.** 1,035 **D.** 1,145

6. What is the value of 87×56 ? 6. **G**
F. 4,216 **G.** 4,872 **H.** 5,042 **I.** 5,632

7. What is the value of 356×15 ? 7. **A**
A. 5,340 **B.** 5,870 **C.** 6,020 **D.** 6,640

8. What is the value of 217×24 ? 8. **G**
F. 4,464 **G.** 5,208 **H.** 6,052 **I.** 6,638

9. What is the prime factorization of 44? 9. **B**
A. 2×22 **C.** 1×44
B. $2 \times 2 \times 11$ **D.** $2 \times 2 \times 2 \times 11$

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of 60×120 ? Use mental math.
A. 72,000 B. 7,200 C. 720 D. 72 1. **B**
2. What is the value of 20×500 ? Use mental math.
F. 100 G. 1,000 H. 10,000 I. 100,000 2. **H**
3. Which is the best estimate of 32×49 by using rounding or compatible numbers?
A. 120 B. 150 C. 1,200 D. 1,500 3. **D**
4. Which is the best estimate of 76×22 by using rounding or compatible numbers?
F. 16,000 G. 12,000 H. 1,600 I. 1,200 4. **H**
5. What is the value of 164×11 ?
A. 1,924 B. 1,804 C. 1,762 D. 1,654 5. **B**
6. What is the value of 104×32 ?
F. 2,206 G. 2,944 H. 3,328 I. 3,408 6. **H**
7. What is the value of 83×75 ?
A. 6,225 B. 5,665 C. 5,105 D. 4,735 7. **A**
8. What is the value of 166×14 ?
F. 2,806 G. 2,664 H. 2,408 I. 2,324 8. **I**
9. What is the prime factorization of 32?
A. $2 \times 2 \times 2 \times 2 \times 2$ C. 1×32
B. 2×16 D. $2 \times 2 \times 2 \times 4$ 9. **A**

Chapter Test, Form 2B *(continued)*

- 10.** Find the product of $9 \times 9 \times 9 \times 9$ using exponents. **10.** **G**
F. 6,561 **H.** 9×10^4
G. 9^4 **I.** 9,999
- 11.** What is the value of 7^3 ? **11.** **A**
A. 343 **C.** 49
B. 7×10^3 **D.** 21
- 12.** A car dealership bought 9 new sets of running boards. Each cost \$146. What was the total cost? **12.** **G**
F. \$1,204 **G.** \$1,314 **H.** \$1,602 **I.** \$2,244
- 13.** A school has 18 rooms with 32 desks in each room. How many desks are in the school? **13.** **D**
A. 408 **B.** 506 **C.** 544 **D.** 576
- 14.** Antoine is saving money for vacation. His goal is to get \$250. He has made 11 deposits of \$18 each so far. How much more money does he need to reach his goal? **14.** **F**
F. \$52 **G.** \$68 **H.** \$182 **I.** \$198

Read each question carefully. Write your answer on the line provided.

Multiply.

- 15.** 180×5 **15.** **900**
- 16.** 435×7 **16.** **3,045**
- 17.** 488×13 **17.** **6,344**
- 18.** 54×45 **18.** **2,430**
- 19.** 6×10^2 **19.** **600**
- 20.** $15 \times 2,000$ **20.** **30,000**

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Find each product mentally.

1. $70 \times 300 =$

2. $21 \times 100 =$

3. $8 \times 500 =$

4. $6 \times 10^4 =$

Estimate by rounding or using compatible numbers.

5. $63 \times 51 =$

6. $7 \times 89 =$

7. $9 \times 31 =$

8. $18 \times 91 =$

Multiply.

9. $36 \times 77 =$

10. $124 \times 9 =$

11. $315 \times 40 =$

12. $31 \times 258 =$

13. The floor of a small foyer will be made from square ceramic tiles. Each tile has a side length of 8 inches. If the dimensions of the foyer floor are 24 inches by 48 inches, how many ceramic tiles are needed?

14. Marc wants to hang four rectangular pictures in a row on a wall so that the horizontal space between each picture is always the same. Each picture has a length of 8 inches. The wall has a length of 74 inches. If he wants to have 12 inches of horizontal wall space before the first picture and after the fourth picture, how much space should he leave between pictures?

1. 21,000

2. 2,100

3. 4,000

4. 60,000

Sample answers given for Ex 5–8.

$60 \times 50 =$

5. 3,000

$7 \times 90 =$

6. 630

$10 \times 30 =$

7. 300

$20 \times 90 =$

8. 1,800

9. 2,772

10. 1,116

11. 12,600

12. 7,998

13. 18 tiles

14. 6 in.

Chapter Test, Form 3A (continued)

15. Write the prime factorization of 81. **15. $3 \times 3 \times 3 \times 3$**
16. Write the product of $5 \times 5 \times 5 \times 5 \times 5$ using exponents. **16. 5^5**
17. Each side of a cube-shaped box measures 6 feet. To find the volume, multiply the length times the width times the height. Express the amount of space inside as a power and then find the amount in cubic feet. **17. 6^3 ; 216
cubic feet**
18. Felisa bought 26 boxes of crayons. Each box had 12 crayons. How many crayons did Felisa buy? **18. 312**
19. Dana jogs 955 minutes a month. How many minutes will she jog in 4 months? **19. 3,820
minutes**
20. Mr. and Mrs. Hartford want to buy a car that costs \$12,675. Mr. Hartford saved \$235 each month for 8 months. Mrs. Hartford saved \$375 each month for 9 months. If they combine their money, how much will they have? Will they have enough money to buy the car? **20. \$5,255; no**
21. Derrick has 238 stamps in an album. How many stamps will he have in 4 albums? **21. 952 stamps**
22. Antoinette has 208 coins. Jordan has 3 times as many coins. Use rounding to estimate the number of coins that Jordan has. **22. about 600
coins**
23. Explain how to find 20×10^2 mentally. **23. See
students'
work.**

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Find each product mentally.

1. $1,200 \times 7 =$
2. $400 \times 9 =$
3. $12 \times 800 =$
4. $7 \times 10^3 =$

Estimate by rounding or using compatible numbers.

5. $79 \times 21 =$
6. $8 \times 41 =$
7. $38 \times 59 =$
8. $32 \times 81 =$

Multiply.

9. $85 \times 46 =$
10. $7 \times 567 =$
11. $730 \times 12 =$
12. $84 \times 107 =$

13. The floor of a small foyer will be made from square ceramic tiles. Each tile has a side length of 7 inches. If the dimensions of the foyer floor are 28 inches by 42 inches, how many ceramic tiles are needed?

14. Bethany wants to hang four rectangular pictures in a row on a wall so that the horizontal space between each picture is always the same. Each picture has a length of 9 inches. The wall has a length of 79 inches. If she wants to have 14 inches of horizontal wall space before the first picture and after the fourth picture, how much space should she leave between pictures?

1. 8,400
2. 3,600
3. 9,600
4. 7,000

Sample answers given for Ex 5–8.

- $80 \times 20 =$
5. 1,600
- $8 \times 40 =$
6. 320
- $40 \times 60 =$
7. 2,400
- $30 \times 80 =$
8. 2,400
9. 3,910
10. 3,969
11. 8,760
12. 8,988
13. 24 tiles

14. 5 in.

Chapter Test, Form 3B (continued)

15. Write the prime factorization of 70. **15. $2 \times 5 \times 7$**
16. Write the product of $5 \times 5 \times 5 \times 5 \times 5 \times 5$ using exponents. **16. 5^6**
17. Each side of a cube-shaped box measures 8 feet. To find the volume, multiply the length times the width times the height. Express the amount of space inside as a power and then find the amount in cubic feet. **17. 8^3 ; 512
cubic feet**
18. Ellen bought 18 boxes of paper clips. Each box had 150 paper clips. How many paper clips did Ellen buy? **18. 2,700 paper clips**
19. Regina reads 32 pages of a book each night. How many pages will she read in 5 days? **19. 160 pages**
20. Mr. and Mrs. Williams want to buy a boat that costs \$18,520. Mr. Williams saved \$850 each month for 7 months. Mrs. Williams saved \$970 each month for 7 months. If they combine their money, how much will they have? Will they have enough money to buy the boat? **20. \$12,740;
no**
21. Dirk has 124 baseball cards in an album. How many baseball cards will he have in 6 albums? **21. 744**
22. April has 196 stickers. Meredith has 3 times as many stickers. Use rounding to estimate the number of stickers that Meredith has. **22. about 600
stickers**
23. Explain how to find 25×10^2 mentally. **23. See
students'
work.**

Standardized Test Practice

Read each question. Then fill-in the correct answer.

1. There are 48 rows in the school auditorium. Each row can seat 12 people. If every row is full, how many people can be seated in the auditorium at the same time?

- (A) 600
- (B) 576
- (C) 550
- (D) 476

5. Bethany runs four miles every week. How many miles does she run in 16 weeks?

- (A) 64
- (B) 68
- (C) 72
- (D) 74



2. Find the product 200×7 mentally.

- (F) 1,040
- (G) 1,400
- (H) 14,000
- (I) 7×10^2

6. Which is the best estimate of 71×21 using rounding or compatible numbers?

- (F) 1,200
- (G) 1,400
- (H) 12,000
- (I) 14,000

3. A car dealer has 59 cars on its lot. Each car has four wheels. How many wheels are there altogether?

- (A) 184
- (B) 208
- (C) 216
- (D) 236



7. What is the value of 43×176 ?

- (A) 6,892
- (B) 7,114
- (C) 7,568
- (D) 7,722

4. What is the value of 561×14 ?

- (F) 5,588
- (G) 6,014
- (H) 6,612
- (I) 7,854

8. A cabinet holds 23 books on each shelf. There are 12 shelves. How many books are there in the cabinet?

- (F) 250
- (G) 275
- (H) 276
- (I) 300



Standardized Test Practice (continued)**Read each question. Then fill in the correct answer.**

- | | |
|--|---|
| <p>9. There are three children in the Williams family. If each child has 28 teeth, how many teeth do the Williams children have altogether?</p> <p><input type="radio"/> (A) 56
<input checked="" type="radio"/> (B) 84
<input type="radio"/> (C) 112
<input type="radio"/> (D) 120</p> | <p>13. What is the value of 33×15?</p> <p><input type="radio"/> (A) 315
<input type="radio"/> (B) 435
<input checked="" type="radio"/> (C) 495
<input type="radio"/> (D) 505</p> |
| <p>10. There are thirteen girls in the 5th grade. Each girl has two barrettes in her hair. How many barrettes are in the class?</p> <p><input checked="" type="radio"/> (A) 26
<input type="radio"/> (B) 28
<input type="radio"/> (C) 30
<input type="radio"/> (D) 32</p> | <p>14. What is the value of 5×10^5?</p> <p><input type="radio"/> (F) 5,000
<input type="radio"/> (G) 50,000
<input checked="" type="radio"/> (H) 500,000
<input type="radio"/> (I) 5,000,000</p> |
| <p>11. There are 22 students in a classroom. Each student has five pencils. How many pencils are there altogether?</p> <p><input type="radio"/> (A) 128
<input type="radio"/> (B) 120
<input checked="" type="radio"/> (C) 110
<input type="radio"/> (D) 88</p> | <p>15. Which is the best estimate of 88×92 using rounding or compatible numbers?</p> <p><input type="radio"/> (A) 1,800
<input type="radio"/> (B) 7,200
<input type="radio"/> (C) 8,000
<input checked="" type="radio"/> (D) 8,100</p> |
| <p>12. What is the prime factorization for 50 using exponents?</p> <p><input type="radio"/> (F) 1×50
<input type="radio"/> (G) $2 \times 5 \times 5$
<input type="radio"/> (H) 2×10^5
<input checked="" type="radio"/> (I) 2×5^2</p> | <p>16. A souvenir shop has 4,000 boxes of cards in stock. Each box contains six cards. How many cards are there in stock?</p> <p><input type="radio"/> (F) 240
<input type="radio"/> (G) 2,400
<input checked="" type="radio"/> (H) 24,000
<input type="radio"/> (I) 240,000</p> |

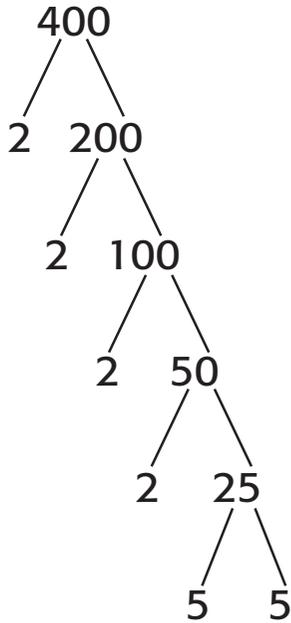


Chapter Assessment Answer Key

Extended-Response Test, Page 53 Sample Answers

In addition to the scoring rubric found on page 54, the following sample answers may be used as guidance in evaluating open-ended assessment items.

1. a. Sample answer: $2 \times 2 \times 2 \times 2 \times 5 \times 5$



b. $2^4 \times 5^2$

2. a. The museum has already sold 2,000 tickets.

b. The museum needs to make \$12,000 more in August.

c. $\$12 \times t = \$12,000$; 1,000 tickets still need to be sold.

Extended-Response Rubric

Score	Explanation
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

For this activity, gather a box of 100 paper clips or a similar number of other small objects and model for the student the concept of arranging the objects into smaller groups and using the Distributive Property to aid with mental multiplication.

Read each question aloud to the student. The student should rearrange the objects into smaller groups. Then write the student's answer on the line below the question.

1. If you want to multiply 6×16 , how many groups of 6 objects should you make?

16

2. How can you separate 16 into two numbers that are easier to multiply by 6? What two groups of objects do you now have?

16 easily splits into 10 and 6. That leaves 10 groups of 6 and 6 groups of 6.

3. What is 6×10 ?

60

4. What is 6×6 ?

36

5. What is $60 + 36$?

96

6. Write the original problem using the Distributive Property.

$(6 \times 10) + (6 \times 6) = 96$

Oral Assessment (continued)

Read each question aloud to the student. Then write the student's answer on the line below the question.

Janie is saving money for a new video game. Each week, she doubles the amount she saves from the previous week. If she saves \$1 the first week, how much money will she save in week 5? Use the table to show your work.

Week	1	2	3	4	5
Amount saved (\$)	\$1	\$2	\$4	\$8	\$16

7. How much will she save in week 2?

\$2

8. Tell how you got your answer.

I doubled the amount from the first week. $\$1 \times 2 = \2

9. How much will she save in week 3?

\$4

10. Tell how you got your answer.

I doubled the amount from the second week. $\$2 \times 2 = \4

11. Finish the table, then add the totals together. How much money has she saved in five weeks?

\$31

12. If she needs \$40 for the video game, how many more weeks does she need to save?

1 more week

Am I Ready?

Practice

Multiply.

1. $14 \times 2 = \underline{\mathbf{28}}$

2. $21 \times 4 = \underline{\mathbf{84}}$

3. $11 \times 5 = \underline{\mathbf{55}}$

4. $50 \times 6 = \underline{\mathbf{300}}$

5. $21 \times 5 = \underline{\mathbf{105}}$

6. $51 \times 8 = \underline{\mathbf{408}}$

7. $3 \times 25 = \underline{\mathbf{75}}$

8. $5 \times 15 = \underline{\mathbf{75}}$

9. $8 \times 82 = \underline{\mathbf{656}}$

10. $7 \times 19 = \underline{\mathbf{133}}$

Round each number to its greatest place value.

11. $212 = \underline{\mathbf{200}}$

12. $1,673 = \underline{\mathbf{2,000}}$

13. $380 = \underline{\mathbf{400}}$

14. $\$37,252 = \underline{\mathbf{\$40,000}}$

15. $\$1,289 = \underline{\mathbf{\$1,000}}$

16. $34,500 = \underline{\mathbf{30,000}}$

17. $23,945 = \underline{\mathbf{20,000}}$

18. $3,025 = \underline{\mathbf{3,000}}$

19. $59,721 = \underline{\mathbf{60,000}}$

20. $782 = \underline{\mathbf{800}}$

Divide.

21. $12 \div 4 = \underline{\mathbf{3}}$

22. $42 \div 6 = \underline{\mathbf{7}}$

23. $14 \div 7 = \underline{\mathbf{2}}$

24. $48 \div 6 = \underline{\mathbf{8}}$

25. $64 \div 8 = \underline{\mathbf{8}}$

26. $15 \div 3 = \underline{\mathbf{5}}$

27. $81 \div 9 = \underline{\mathbf{9}}$

28. $45 \div 5 = \underline{\mathbf{9}}$

29. $56 \div 7 = \underline{\mathbf{8}}$

30. $24 \div 8 = \underline{\mathbf{3}}$

Am I Ready?

Review

Multiplication

Step 1 Multiply the ones.

$$\begin{array}{r} 4 \\ 38 \\ \times 6 \\ \hline 8 \end{array}$$

$6 \times 8 \text{ ones} = 48 \text{ ones}$

$48 \text{ ones} = 4 \text{ tens and } 8 \text{ ones}$

Step 2 Multiply the tens.

$$\begin{array}{r} 4 \\ 38 \\ \times 6 \\ \hline 228 \end{array}$$

$6 \times 3 \text{ tens} = 18 \text{ tens}$

$18 \text{ tens} + 4 \text{ tens} = 22 \text{ tens}$

Multiply.

$$\begin{array}{r} 1. \ 12 \\ \times 4 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 2. \ 21 \\ \times 3 \\ \hline 63 \end{array}$$

$$\begin{array}{r} 3. \ 43 \\ \times 2 \\ \hline 86 \end{array}$$

$$\begin{array}{r} 4. \ 51 \\ \times 6 \\ \hline 306 \end{array}$$

$$\begin{array}{r} 5. \ 83 \\ \times 3 \\ \hline 249 \end{array}$$

$$\begin{array}{r} 6. \ 71 \\ \times 4 \\ \hline 284 \end{array}$$

$$\begin{array}{r} 7. \ 45 \\ \times 8 \\ \hline 360 \end{array}$$

$$\begin{array}{r} 8. \ 62 \\ \times 6 \\ \hline 372 \end{array}$$

$$\begin{array}{r} 9. \ 39 \\ \times 9 \\ \hline 351 \end{array}$$

$$\begin{array}{r} 10. \ 27 \\ \times 5 \\ \hline 135 \end{array}$$

$$\begin{array}{r} 11. \ 29 \\ \times 3 \\ \hline 87 \end{array}$$

$$\begin{array}{r} 12. \ 63 \\ \times 7 \\ \hline 441 \end{array}$$

$$\begin{array}{r} 13. \ 44 \\ \times 3 \\ \hline 132 \end{array}$$

$$\begin{array}{r} 14. \ 48 \\ \times 5 \\ \hline 240 \end{array}$$

$$\begin{array}{r} 15. \ 97 \\ \times 3 \\ \hline 291 \end{array}$$

$$\begin{array}{r} 16. \ 40 \\ \times 2 \\ \hline 80 \end{array}$$

Am I Ready?

Apply

Solve.

1. Megan bought 4 packs of pencils for school. Each pack contained 8 pencils. How many pencils did Megan buy in all?

32 pencils

2. José helps his mom groom dogs. They can groom 2 small dogs each hour. How many small dogs can they groom in 8 hours?

16 small dogs

3. The local football team's best running back rushed for 1,474 yards. Round the number of rushing yards to the nearest thousand.

1,000 yards

4. Annika has \$369 in her savings account. Rounded to the nearest hundred, how much money has Annika saved?

\$400

5. Christian walks a total of 24 miles in 8 days. If he walks the same number of miles each day, how many miles does Christian walk each day?

3 miles

6. A tailor uses 5 yards of fabric to make one dress. How many dresses can the tailor make with 45 yards of fabric?

9 dresses

7. Bradley plays tennis with three friends. If each player brings 3 tennis balls, how many tennis balls do they have altogether?

12 tennis balls

8. Isabel packs 2 boxes of raisins in each bag. How many boxes of raisins will Isabel need to pack 15 bags?

30 boxes

Diagnostic Test**Multiply.**

1. $10 \times 2 =$

2. $36 \times 6 =$

1. **20**

2. **216**

3. $16 \times 8 =$

4. $21 \times 7 =$

3. **128**

4. **147**

5. $40 \times 5 =$

6. $72 \times 9 =$

5. **200**

6. **648**

7. Sandwiches at the local deli cost \$4. James is buying one sandwich for himself and 6 for his friends. How much will James pay for all of the sandwiches?

7. **\$28**

Round each number to its greatest place value.

8. 56

9. 78

8. **60**

9. **80**

10. 7,810

11. 3,401

10. **8,000**

11. **3,000**

12. 59,630

13. 13,409

12. **60,000**

13. **10,000**

Divide.

14. $18 \div 6 =$

15. $28 \div 7 =$

14. **3**

15. **4**

16. $56 \div 8 =$

17. $63 \div 9 =$

16. **7**

17. **7**

18. $15 \div 3 =$

19. $12 \div 4 =$

18. **5**

19. **3**

20. $81 \div 9 =$

21. $35 \div 5 =$

20. **9**

21. **7**

Pretest**Divide mentally.**

1. $200 \div 2 =$

2. $350 \div 5 =$

3. $60 \div 3 =$

4. $120 \div 10 =$

Estimate. Show your work.

5. $813 \div 8 =$

6. $136 \div 4 =$

7. $274 \div 9 =$

8. $500 \div 3 =$

Divide.

9. $312 \div 2 =$

10. $93 \div 3 =$

11. $428 \div 4 =$

12. $96 \div 6 =$

13. $138 \div 7 =$

14. $315 \div 5 =$

15. $468 \div 8 =$

16. $913 \div 9 =$

Solve. Explain how you interpreted the remainder.

17. Mrs. Perkins made 157 lemon bars for the bake sale. She put them into bags of 2 bars each. How many bags of lemon bars can she make?

18. Mr. Jenson is buying pencils to sell at his art supply store. His budget is \$205. If packs of 100 pencils cost \$8, how many packs can he buy?

Sample answers given for Ex. 5–8

1. 100

2. 70

3. 20

4. 12

5. $800 \div 8 = 100$

6. $120 \div 4 = 30$

7. $270 \div 9 = 30$

8. $480 \div 3 = 160$

9. 156

10. 31

11. 107

12. 16

13. 19 R5

14. 63

15. 58 R4

16. 101 R4

17. 78, 1 will be left.

18. 25, \$5 will be left.

Check My Progress *(Lessons 1 through 4)*

Write a fact family for each set of numbers.

1. 2, 5, 10

2. 5, 8, 40

3. 4, 9, 36

4. 6, 9, 54

Divide.

5. $2 \overline{)26}$

6. $4 \overline{)45}$

7. $3 \overline{)39}$

8. $4 \overline{)89}$

Divide mentally.

9. $600 \div 3 =$

10. $240 \div 8 =$

11. $80 \div 4 =$

12. $420 \div 6 =$

Solve.

13. John went to the park and saw 44 animal legs. If each animal had 4 legs, how many animals did he see?

14. Emma saw a total of 220 animals at the zoo. The animals are divided equally into 10 sections. How many animals are in each section?

1. $2 \times 5 = 10;$
 $5 \times 2 = 10;$
 $10 \div 2 = 5;$
 $10 \div 5 = 2$

2. $5 \times 8 = 40;$
 $8 \times 5 = 40;$
 $40 \div 5 = 8;$
 $40 \div 8 = 5$

3. $4 \times 9 = 36;$
 $9 \times 4 = 36;$
 $36 \div 4 = 9;$
 $36 \div 9 = 4$

4. $6 \times 9 = 54;$
 $9 \times 6 = 54;$
 $54 \div 6 = 9;$
 $54 \div 9 = 6$

5. 13

6. $11 \text{ R}1$

7. 13

8. $22 \text{ R}1$

9. 200

10. 30

11. 20

12. 70

13. 11 animals

14. 22 animals

Check My Progress (*Lessons 5 through 8*)**Estimate. Show how you estimated.**

1. $58 \div 7 =$

2. $83 \div 9 =$

3. $26 \div 5 =$

4. $372 \div 6 =$

5. $431 \div 7 =$

6. $651 \div 8 =$

Sample answers given for Ex. 1-6.

1. $\underline{56 \div 7 = 8}$

2. $\underline{81 \div 9 = 9}$

3. $\underline{25 \div 5 = 5}$

4. $\underline{360 \div 6 = 60}$

5. $\underline{420 \div 7 = 60}$

6. $\underline{640 \div 8 = 80}$

Divide.

7. $881 \div 4 =$

8. $652 \div 3 =$

9. $728 \div 3 =$

10. $804 \div 2 =$

11. $618 \div 3 =$

12. $424 \div 4 =$

7. $\underline{220 \text{ R}1}$

8. $\underline{217 \text{ R}1}$

9. $\underline{242 \text{ R}2}$

10. $\underline{402}$

11. $\underline{206}$

12. $\underline{106}$

Divide. Check your answer using multiplication.

13. $5 \overline{)385}$

14. $3 \overline{)162}$

15. $8 \overline{)734}$

16. $9 \overline{)582}$

17. $4 \overline{)236}$

18. $6 \overline{)521}$

13. $\underline{77}$

14. $\underline{54}$

15. $\underline{91 \text{ R}6}$

16. $\underline{64 \text{ R}6}$

17. $\underline{59}$

18. $\underline{86 \text{ R}5}$

Vocabulary Test

Write a description for the boldfaced word(s) on the line below each sentence.

1. The teacher asked the students to write the **fact family** for the numbers 7, 8, and 56.

Sample answer: A fact family is a group of related facts that use the same numbers.

2. The **dividend** in $15 \div 3$ is 15.

Sample answer: The number that is being divided.

3. The **divisor** in $15 \div 3$ is 3.

Sample answer: The number by which the dividend is being divided.

4. The students solved for the **unknown** in $36 \div 9 = \square$.

Sample answer: The missing value in an equation.

5. The **quotient** in $15 \div 3 = 5$ is 5.

Sample answer: The result of a division problem.

6. The **remainder** in $33 \div 4 = 8 \text{ R}1$ is 1.

Sample answer: The number left when a whole number is divided by another whole number.

7. The teacher asked the students to solve for the **variable** in the equation $9 \times 5 = y$.

Sample answer: A variable is a letter that represents the unknown.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression?

1. $56 \div 8 =$

A. 8

C. 6

B. 7

D. 5

1. **B**

2. $20 \div 4 =$

F. 3

H. 5

G. 4

I. 6

2. **H**

3. $21 \div 7 =$

A. 9

C. 5

B. 7

D. 3

3. **D**

4. $2 \overline{)42}$

F. 20

H. 22

G. 21

I. 23

4. **G**

5. $6 \overline{)78}$

A. 13

C. 17

B. 15

D. 19

5. **A**

6. $4 \overline{)84}$

F. 12

H. 20

G. 18

I. 21

6. **I**

7. $720 \div 8 =$

A. 110

C. 90

B. 100

D. 80

7. **C**

8. $300 \div 10 =$

F. 3

H. 300

G. 30

I. 3,000

8. **G**

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression?

1. $64 \div 8 =$

A. 8

C. 6

B. 7

D. 5

1. **A**

2. $24 \div 4 =$

F. 3

H. 5

G. 4

I. 6

2. **I**

3. $35 \div 7 =$

A. 9

C. 5

B. 7

D. 3

3. **C**

4. $2 \overline{)44}$

F. 20

H. 22

G. 21

I. 23

4. **H**

5. $6 \overline{)90}$

A. 13

C. 17

B. 15

D. 19

5. **B**

6. $4 \overline{)48}$

F. 12

H. 20

G. 18

I. 21

6. **F**

7. $300 \div 5 =$

A. 150

C. 15

B. 60

D. 6

7. **B**

8. $800 \div 20 =$

F. 4,000

H. 40

G. 400

I. 4

8. **H**

Chapter Test, Form 1B *(continued)*

9. Which is the best estimate of $243 \div 8$?

- A. 24 C. 32
 B. 30 D. 40

9. **B**

10. Which is the best estimate of $349 \div 7$?

- F. 50 H. 40
 G. 45 I. 35

10. **F**

What is the value of each expression?

11. $3 \overline{)589}$

- A. 150 C. 193 R1
 B. 196 R1 D. 200

11. **B**

12. $927 \div 9 =$

- F. 100 H. 110
 G. 103 I. 120

12. **G**

13. $645 \div 3 =$

- A. 200 C. 215
 B. 213 D. 220

13. **C**

14. A group of 80 students arrive at Marla's Restaurant. If each table at the restaurant seats 6 people, how many tables will the group need?

- F. 12 tables H. 14 tables
 G. 13 tables I. 15 tables

14. **H**

15. Doreen plans to divide her stickers among 5 friends. If she has 55 stickers, how many stickers will each friend receive?

- A. 14 stickers C. 12 stickers
 B. 13 stickers D. 11 stickers

15. **D**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. A total of 66 parents attend the school debate. Each row of chairs seats 6 people. How many rows of chairs will the parents need?

A. 12 rows **C.** 10 rows
B. 11 rows **D.** 9 rows

1. **B**

What is the value of each expression?

2. $54 \div 3 =$

F. 18 **H.** 9
G. 11 **I.** 7

2. **F**

3. $42 \div 6 =$

A. 9 **C.** 7
B. 8 **D.** 6

3. **C**

4. $240 \div 6 =$

F. 10 **H.** 30
G. 20 **I.** 40

4. **I**

5. $800 \div 4 =$

A. 2 **C.** 20
B. 10 **D.** 200

5. **D**

6. Which is the best estimate of $154 \div 5$?

F. 30 **H.** 40
G. 35 **I.** 45

6. **F**

7. Which is the best estimate of $381 \div 9$?

A. 50 **C.** 30
B. 40 **D.** 20

7. **B**

8. Jesse has a 470-page book. If he read 8 pages every day, about how many days will it take him to finish the book?

F. 40 days **H.** 60 days
G. 50 days **I.** 70 days

8. **H**

Chapter Test, Form 2A (continued)

Read each question carefully. Write your answer on the line provided.

What is the value of each expression?

9. $2\overline{)247}$ 9. 123 R1
10. $3\overline{)398}$ 10. 132 R2
11. $9\overline{)280}$ 11. 31 R1
12. $5\overline{)425}$ 12. 85
13. $4\overline{)432}$ 13. 108
14. Ms. Richardson spent \$114 on apples for the carnival. If each bag of apples costs \$2, how many bags did she buy? 14. 57 bags
15. A total of 48 students are going on a field trip to the zoo. If there needs to be an adult for every 4 students, how many adults are needed? 15. 12 adults
16. Each picnic table at the park seats 8 people. How many tables will 24 people need? 16. 3 tables
17. Mr. Conrad has \$138 to buy basketballs. About how many can he buy at \$7 each? 17. 20 basketballs
18. Mark gave 21 tadpoles to his three friends. Mark gave twice as many tadpoles to David as he did Chris. George received twice as many tadpoles as David. How many tadpoles did each friend receive? 18. Chris: 3;
David: 6;
George: 12

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. A group of 48 parents arrive at the school band concert. There are rows of chairs set up, and each row seats 4 people. How many rows of chairs will the parents need?

A. 21 rows C. 11 rows
B. 12 rows D. 9 rows

1. **B**

What is the value of each expression?

2. $64 \div 4 =$

F. 8 H. 16
G. 10 I. 20

2. **H**

3. $72 \div 8 =$

A. 6 C. 8
B. 7 D. 9

3. **D**

4. $210 \div 3 =$

F. 50 H. 70
G. 60 I. 80

4. **H**

5. $400 \div 2 =$

A. 200 C. 50
B. 100 D. 5

5. **A**

6. Which is the best estimate of $157 \div 2$?

F. 70 H. 90
G. 80 I. 100

6. **G**

7. Which is the best estimate of $108 \div 5$?

A. 28 C. 25
B. 26 D. 20

7. **D**

8. A company sold 356 products. Each client bought 6 products. About how many clients did the company have?

F. 10 clients H. 60 clients
G. 50 clients I. 70 clients

8. **H**

Chapter Test, Form 2B (continued)

Read each question carefully. Write the answer on the line provided.

What is the value of each expression?

9. $4\overline{)638}$ 9. 159 R2
10. $7\overline{)752}$ 10. 107 R3
11. $3\overline{)286}$ 11. 95 R1
12. $3\overline{)273}$ 12. 91
13. $4\overline{)804}$ 13. 201
14. Luis has a 408-page book. If he reads 4 pages every day, how many days will it take him to finish the book? 14. 102 days
15. On a class trip to the aquarium, there is 1 adult for every 7 students. If 44 students go on the class trip, how many adults are going on the class trip? 15. 7 adults
16. Three families went to the fair together. An adult ticket cost \$7, and a child ticket cost \$5. If they spent a total of \$58, how many adults and how many children were there? 16. 4 adults
6 children
17. Erin wants to equally divide oatmeal bars among 5 friends. If she has 12 bars, how many bars will each friend receive? 17. 2 bars
18. Jerome has \$38 to buy tickets to the museum. How many tickets can he buy if each ticket costs \$8? 18. 4 tickets

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Divide.

1. $71 \div 3 = \square$

2. $47 \div 4 = \square$

3. A group of 88 parents arrive at the school for the graduation ceremony. There are rows of chairs set up in the auditorium, and each row seats 8 people. How many rows of chairs will the parents need?

4. Divide mentally. $810 \div 9 = \square$

5. Divide mentally. $150 \div 3 = \square$

6. Estimate.
 $323 \div 5 =$

7. Estimate.
 $232 \div 4 =$

8. Adam has a 197-page book. If he reads 9 pages every day, about how many days will it take him to finish the book?

Divide.

9. $2 \overline{)682}$

10. $3 \overline{)640}$

11. $4 \overline{)491}$

12. $7 \overline{)625}$

13. $6 \overline{)343}$

1. 23 R2

2. 11 R3

3. 11 rows

4. 90

5. 50

6. **Sample answer:**
 $300 \div 5 = 60$

7. **Sample answer:**
 $240 \div 4 = 60$

8. **Sample answer:**
20 days

9. 341

10. 213 R1

11. 122 R3

12. 89 R2

13. 57 R1

Chapter Test, Form 3A (continued)

14. $8\overline{)712}$

14. 89

15. $5\overline{)530}$

15. 106

16. A grocery sold 990 pears in September. If each bag contained 9 pears, how many bags of pears were sold?

16. 110 bags of pears

17. Kuri spent a total of \$68 on trading cards. His collection contains two types of cards. A pack of trading card A cost \$4, and a pack of trading card B cost \$7. How many packs of each type of trading card were purchased if the total number of packs is 11?

Sample answer:
17. trading card A:
3 packs;
trading card B:
8 packs

18. On a class trip to the art museum, there is 1 adult for every 5 students. If 6 adults go on the class trip, about how many students are going on the class trip?

18. 30 students

19. Andre plans to share key chains with 4 classmates. If he has 10 key chains, how many key chains will each friend receive?

19. 2 key chains

20. A group of students travel by bus 467 miles in 4 days. If they travel the same amount of miles each day, about how many miles does the group travel each day?

20. 120 miles

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Divide.

1. $58 \div 5 = \square$

2. $86 \div 4 = \square$

3. A group of 72 parents arrive at the school on Friday night for the spring musical. There are rows of chairs set up in the auditorium, and each row seats 6 people. How many rows of chairs will the parents need?

4. Divide mentally. $990 \div 3 = \square$

5. Divide mentally. $210 \div 70 = \square$

6. Estimate.
 $482 \div 6 =$

7. Estimate.
 $176 \div 9 =$

8. Vivian has a 550-page book on folk tales. If she reads 9 pages every day before falling asleep, about how many days will it take her to finish the book?

Divide.

9. $2 \overline{)826}$

10. $4 \overline{)849}$

11. $5 \overline{)612}$

12. $7 \overline{)419}$

13. $4 \overline{)225}$

1. 11 R3

2. 21 R2

3. 12 rows

4. 330

5. 3

6. **Sample answer:**
 $480 \div 6 = 80$

7. **Sample answer:**
 $180 \div 9 = 20$

8. **Sample answer:**
 $600 \div 10 = 60$

days

9. 413

10. 212 R1

11. 122 R2

12. 59 R6

13. 56 R1

Chapter Test, Form 3B (continued)

14. $9\overline{)783}$

14. 87

15. $6\overline{)618}$

15. 103

16. A grocery sold \$218 in oranges in June. If each bag cost \$2, how many bags of oranges did the grocery sell?

16. 109 bags
of oranges

17. Jonathan needs two different kinds of socks for school. A pair of gym socks costs \$3, and a pair of dress socks costs \$5. If he spent a total of \$50 on socks, how many of each type of sock did he purchase if the total number of pairs of socks is 12?

17. gym: 5 pairs;
dress: 7 pairs

18. On a class trip to the public library, there is 1 chaperone for every 4 students. If 5 chaperones go on the class trip, how many students go on the class trip?

18. 20 students

19. Deena plans to share yogurt cups with 3 classmates. If she has 5 vanilla yogurt cups and 2 strawberry yogurt cups, how many yogurt cups will each friend receive?

19. 2 yogurt cups

20. A group of students travel 14 miles in 3 days. If they travel the same amount of miles each day, about how many miles does the group travel each day?

20. Sample answer:
 $95 \div 3 = 5$ miles

Standardized Test Practice

Read each question. Fill in the correct answer.

1. A chef purchased 120 ears of corn at the farmer's market. The ears of corn are divided evenly into 5 bushels. How many ears of corn are in each bushel?



- A 24 ears of corn
- B 15 ears of corn
- C 8 ears of corn
- D 5 ears of corn

2. There are 68 players attending the baseball training camp. If the players are divided into groups of 4, how many groups are there?



- F 27 groups
- G 20 groups
- H 17 groups
- I 7 groups

3. In 3 hours, Darla read 63 pages. If she read the same number of pages each hour, how many pages did Darla read in one hour?

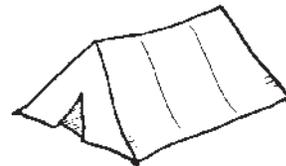
- A 20 pages
- B 21 pages
- C 31 pages
- D 33 pages

4. A grocery store has 240 juice drinks on its shelves. The juice drinks are in packs of 6 each. How many packs are there altogether?



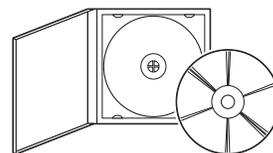
- F 14 packs
- G 20 packs
- H 24 packs
- J 40 packs

5. There are 375 students in attendance at the summer camp. The students are divided equally into groups of 5. How many groups are there?



- K 75 students
- L 80 students
- M 85 students
- N 90 students

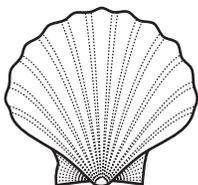
6. Brandon has a cabinet with 4 shelves. The cabinet can hold 1,600 CDs. If the shelves each hold the same number of CDs, how many CDs does each shelf hold?



- F 350 CDs
- G 375 CDs
- H 400 CDs
- I 425 CDs

Standardized Test Practice *(continued)*

7. Carrie has 56 seashells in her collection. She stores the seashells in display cases that hold 8 seashells per case. How many display cases are filled with seashells?



- Ⓐ 10 cases ● 7 cases
 Ⓑ 9 cases Ⓓ 6 cases

10. There are 150 people seated in the theater for a play. There are 5 rows in the theater, each with the same number of seats. If the auditorium is completely filled, how many seats are in each row?



- Ⓕ 20 seats Ⓗ 60 seats
 ● 30 seats Ⓘ 100 seats

8. Sam spent \$24 on lunch for himself and his friends. The price of each item is shown in the table below. If he bought twice as many drinks as sandwiches, how many of each item did he buy?

Deli Prices	
Sandwich	\$4
Drink	\$2

- Ⓕ 2 sandwiches, 4 drinks
 Ⓗ 4 sandwiches, 8 drinks
 Ⓒ 4 sandwiches, 4 drinks
 ● 3 sandwiches, 6 drinks

11. Rita biked 75 miles in 3 weeks. If she biked the same number of miles every week, how many miles did she bike each week?



- Ⓐ 30 miles Ⓒ 20 miles
 ● 25 miles Ⓓ 15 miles

12. A bakery owner needs 30 ounces of vanilla. How many 6-ounce bottles of vanilla must the owner buy?



- Ⓕ 10 bottles ● 5 bottles
 Ⓒ 8 bottles Ⓘ 4 bottles

9. Jackie counts 28 legs on 8 animals. If the animals are either zebras or peacocks, how many zebras are there?

- Ⓐ 4 zebras ● 6 zebras
 Ⓑ 5 zebras Ⓓ 7 zebras



Chapter Assessment Answer Key

Extended-Response Test, Page 79 Sample Answers

In addition to the scoring rubric found on page 80, the following sample answers may be used as guidance in evaluating open-ended assessment items.

- 1.** A divisor is the number that the dividend is being divided by. A dividend is the number being divided. A quotient is the answer to a division problem.
 - a.** In $54 \div 6 = 9$, 54 is the dividend, 6 is the divisor, and 9 is the quotient.
 - b.** The remainder in a division problem is the number that is left after one whole number is divided by another. For example: $17 \div 7 = 2$ R3 because two 7's equals 14, leaving 3 ones left over.
- 2.** The remainder is always less than the divisor because if the remainder is greater than the divisor, then the quotient should be larger.
- 3.** You can use multiplication to check division as shown: For $1,200 \div 4 = 300$, you can perform the following multiplication problem to check the division: $300 \times 4 = 1,200$.

Extended-Response Rubric

Score	Explanation
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Collect 30 objects from around the classroom. Collect 10 pieces of paper, 10 pencils, 5 crayons, and 5 erasers. These items will be used to demonstrate dividing by one-digit numbers.

Read each question aloud to the student. Then write the student's answers on the lines below the questions.

Let's review some words that will help us understand division.

1. What is the difference between a dividend and a divisor?

A dividend is the number that is divided. A divisor is the number used to divide another number.

2. What is a quotient?

A quotient is the result when one number is divided by another.

3. If we want to write a division problem in which we divide by a one-digit number, which of the objects on the table can we use as our divisor?

Sample answers: crayons or erasers

4. Explain your answer.

If we want to divide by a one-digit number, we need to use crayons or erasers because we have one-digit amounts of both, so either could work as our divisor.

5. Let's write a division problem based on what we've talked about above.

$$10 \div 5 = 2 \quad \text{or} \quad 2$$

$$\begin{array}{r} 5 \overline{)10} \\ -10 \\ \hline 0 \end{array}$$

6. What number is our quotient?

2

Oral Assessment *(continued)*

Work through the word problem that follows with the student by reading each question aloud and writing the student's answer on the lines that follow.

Six pre-owned movies cost \$60. If all the movies cost the same, what is the cost of each?

7. Will we use multiplication or division to solve the problem above?

division

8. What number will be our divisor? What number will be our dividend?

6; \$60

9. Set up the problem so we can solve.

\$60 ÷ 6 = \$10

10. Let's write a word problem together where we use division to solve the problem.

See students' work.

Am I Ready?

Practice

Estimate. Tell whether the estimate is *greater than* or *less than* the actual product. Show your work.

1. $115 \times 24 =$ **$100 \times 20 = 2,000$; less than**

2. $268 \times 25 =$ **$300 \times 30 = 9,000$; greater than**

3. $378 \times 67 =$ **$400 \times 70 = 28,000$; greater than**

4. $302 \times 73 =$ **$300 \times 70 = 21,000$; less than**

Multiply.

5. $591 \times 5 =$

2,955

6. $1,162 \times 4 =$

4,648

7. $2,084 \times 8 =$

16,672

8. $8,893 \times 2 =$

17,786

9. $245 \times 18 =$

4,410

10. $491 \times 27 =$

13,257

11. $549 \times 39 =$

21,411

12. $843 \times 86 =$

72,498

Solve.

- 13.** Tamika and Devon hiked 7 miles each day for 5 days. How many miles did Tamika and Devon hike in all?

35 miles

- 14.** Fernando's dogs eat 3 cups of food each day. How much food will his dogs eat in 30 days?

90 cups

- 15.** Each page in Dana's sticker album holds 121 stickers. Dana has filled 11 pages of her album. How many stickers does she have in all?

1,331 stickers

- 16.** Linda sold 132 magazine subscriptions for her school fundraiser. Each magazine subscription costs \$9. How much money did Linda collect?

\$1,188

Am I Ready?

Review

Multiply 58×16 .

Step 1 Multiply 58 by 6.

$$\begin{array}{r} 4 \\ 58 \\ \times 16 \\ \hline 348 \end{array}$$

$6 \times 8 \text{ ones} = 48 \text{ ones}$

$6 \times 5 \text{ tens} = 30 \text{ tens}$

$48 \text{ ones} = 4 \text{ tens and } 8 \text{ ones}$

$30 \text{ tens} + 4 \text{ tens} = 34 \text{ tens}$

$34 \text{ tens} = 3 \text{ hundreds and } 4 \text{ tens}$

Step 2 Multiply 58 by 10.

$$\begin{array}{r} 58 \\ \times 16 \\ \hline 348 \\ + 580 \\ \hline \end{array}$$

$10 \times 8 \text{ ones} = 80 \text{ ones}$

$10 \times 5 \text{ tens} = 50 \text{ tens}$

$80 \text{ ones} = 8 \text{ tens and } 0 \text{ ones}$

$50 \text{ tens} + 8 \text{ tens} = 58 \text{ tens}$

$58 \text{ tens} = 5 \text{ hundreds and } 8 \text{ tens}$

Step 3 Add.

$$\begin{array}{r} 58 \\ \times 16 \\ \hline 348 \\ + 580 \\ \hline 928 \end{array}$$

Multiply.

1. $28 \times 3 = \underline{\mathbf{84}}$

2. $150 \times 6 = \underline{\mathbf{900}}$

3. $42 \times 12 = \underline{\mathbf{504}}$

4. $34 \times 25 = \underline{\mathbf{850}}$

5. $813 \times 43 = \underline{\mathbf{34,959}}$

6. $73 \times 14 = \underline{\mathbf{1,022}}$

7. $416 \times 3 = \underline{\mathbf{1,248}}$

8. $58 \times 23 = \underline{\mathbf{1,334}}$

9. $21 \times 19 = \underline{\mathbf{399}}$

10. $138 \times 5 = \underline{\mathbf{690}}$

11. $39 \times 12 = \underline{\mathbf{468}}$

12. $27 \times 29 = \underline{\mathbf{783}}$

Am I Ready?

Apply

Solve.

1. Elena purchased 12 packs of trading cards. Each pack contained 25 cards. How many trading cards did Elena purchase in all?

300 trading cards

2. Ahmed has 15 albums filled with baseball cards. Each album holds 225 cards. How many baseball cards does Ahmed have in all?

3,375 baseball cards

3. Dan is the running back on his high school football team. Last year, he ran for 199 yards in each of 7 games. How many yards did Dan run last year?

1,393 yards

4. Nicole saves \$793 each year. How much will she have saved after 15 years?

\$11,895

5. Rico rides his bike 15 miles each day. How many miles will he travel after 8 days?

120 miles

6. Ms. Jones purchased 15 reams of paper for an art project. Each ream of paper contained 500 sheets. How many sheets of paper did Ms. Jones purchase in all?

7,500 sheets

7. Tony is making 24 trays of chocolate-covered donuts. There are 24 donuts on each tray. How many donuts is Tony making in all?

576 donuts

8. Sarah is volunteering at a fundraising event for a local charity. She is packing snack bags for the participants. She can pack 38 bags each hour. How many bags can she pack in 12 hours?

456 bags

Diagnostic Test

Estimate. Tell whether the estimate is *greater than* or *less than* the actual product. Show your work.

1. $275 \times 36 =$

2. $118 \times 12 =$

3. $588 \times 27 =$

4. $202 \times 63 =$

$300 \times 40 =$
1. **12,000; greater than**

2. $100 \times 10 =$
1,000; less than

3. $600 \times 30 =$
18,000; greater than

4. $200 \times 60 =$
12,000; less than

Multiply.

5. $391 \times 7 =$

6. $1,392 \times 4 =$

7. $3,804 \times 5 =$

5. **2,737**

6. **5,568**

8. $645 \times 38 =$

9. $191 \times 57 =$

10. $449 \times 79 =$

7. **19,020**

8. **24,510**

9. **10,887**

10. **35,471**

Solve.

11. The Franco family is driving to a national park for vacation. They plan to drive 300 miles each day for 4 days. How many miles will the Franco family drive in all?

11. **1,200 miles**

12. Jin sold 37 boxes of wrapping paper for the school's fundraiser. Each box of wrapping paper costs \$12. How much money did Jin collect?

12. **\$444**

13. Carson purchased 15 packs of baseball cards. There are 25 cards in each pack. How many baseball cards did Carson purchase in all?

13. **375 baseball cards**

Pretest**Estimate. Show your work.**

1. $321 \div 13 =$

2. $614 \div 34 =$

3. $783 \div 43 =$

4. $645 \div 81 =$

Divide.

5. $450 \div 18 =$

6. $620 \div 31 =$

7. $594 \div 28 =$

8. $498 \div 78 =$

9. $944 \div 59 =$

10. $385 \div 29 =$

Divide. Check for reasonableness.

11. $7,440 \div 48 =$

12. $6,120 \div 11 =$

13. $5,994 \div 78 =$

14. $4,482 \div 83 =$

15. $19,552 \div 52 =$

16. $33,985 \div 71 =$

Solve.

17. A library has 528 books on 12 shelves. Each shelf holds the same number of books. How many books are on each shelf?

18. A package of 500 craft sticks is being used for an art project. Each student in the class receives the same number of craft sticks. If there are 26 students in the class, how many craft sticks will each student receive? How many craft sticks will be left?

Sample answers given for Ex 1–4.

1. $\underline{300 \div 10 = 30}$

2. $\underline{600 \div 30 = 20}$

3. $\underline{800 \div 40 = 20}$

4. $\underline{640 \div 80 = 8}$

5. $\underline{\quad 25 \quad}$

6. $\underline{\quad 20 \quad}$

7. $\underline{\quad 21 \text{ R}6 \quad}$

8. $\underline{\quad 6 \text{ R}30 \quad}$

9. $\underline{\quad 16 \quad}$

10. $\underline{\quad 13 \text{ R}8 \quad}$

11. $\underline{\quad 155 \quad}$

12. $\underline{\quad 556 \text{ R}4 \quad}$

13. $\underline{\quad 76 \text{ R}66 \quad}$

14. $\underline{\quad 54 \quad}$

15. $\underline{\quad 376 \quad}$

16. $\underline{\quad 478 \text{ R}47 \quad}$

17. $\underline{\quad 44 \text{ books} \quad}$

18. $\underline{\quad 19 \text{ craft sticks;}$
 $\underline{\quad 6 \text{ craft sticks}$
 $\underline{\quad \text{are left} \quad}$

Check My Progress (Lessons 1 through 3)**Estimate. Show how you estimated.**

1. $84 \overline{)563}$

2. $27 \overline{)388}$

Ex 1-2. Sample answers given.

1. $\underline{560 \div 80 = 7}$

2. $\underline{390 \div 30 = 13}$

Divide. Check your answer for reasonableness.

3. $198 \div 11 =$

3. $\underline{\quad \quad \quad 18}$

4. $210 \div 14 =$

4. $\underline{\quad \quad \quad 15}$

5. $49 \overline{)961}$

5. $\underline{\quad \quad \quad 19 \text{ R}30}$

6. $35 \overline{)770}$

6. $\underline{\quad \quad \quad 22}$

7. $11 \overline{)912}$

7. $\underline{\quad \quad \quad 82 \text{ R}10}$

8. $13 \overline{)656}$

8. $\underline{\quad \quad \quad 50 \text{ R}6}$

Solve.

9. Lauren's basketball coach spent \$324 on 12 new basketballs for the team. How much did each basketball cost?

9. $\underline{\quad \quad \quad \$27}$

Vocabulary Test

Fill in the circle next to the best answer.

- Which word is the number that is being divided?
A. divisor B. quotient C. dividend D. round 1. A B C D
- Which best describes the unknown in a problem?
F. divisor
G. remainder
H. quotient
I. missing value 2. F G H I
- Which word is the number that divides the dividend?
A. divisor B. quotient C. value D. remainder 3. A B C D
- Which of the following best describes a quotient?
F. the answer when you subtract
G. the answer when you multiply
H. the answer when you divide
I. a reasonable guess 4. F G H I
- Which shows a pair of compatible numbers?
A. $7,500 \div 60$
B. $4,150 \div 49$
C. $600 \div 8$
D. $1,200 \div 30$ 5. A B C D
- Which of the following is rounded correctly when estimating the problem?
F. In $8.9 \div 3$, 8.9 rounds to 5.
G. In $130 \div 8$, 8 rounds to 10.
H. In $72 \div 4$, 72 rounds to 80.
I. In $36 \div 7.2$, 7.2 rounds to 8. 6. F G H I

Chapter Test, Form 1A *(continued)*

8. $25 \overline{)902}$

F. 11 R2

H. 36

G. 18 R2

I. 36 R2

8. **I**

9. $91 \overline{)8,591}$

A. 94

C. 94 R37

B. 94 R25

D. 95

9. **C**

10. $88 \overline{)5,662}$

F. 64 R30

H. 60 R34

G. 64 R56

I. 55 R2

10. **F**

11. Mike has a 792-page book. If he reads 36 pages each day, how many days will it take him to finish reading the book?

A. 20 days

C. 22 days

B. 21 days

D. 22 R2 days

11. **C**

12. One hundred sixty-seven students go on a field trip to the zoo. Each van can seat 11 students. Using the fewest number of vehicles possible, how many vans are needed?

F. 11 vans

H. 16 vans

G. 15 vans

I. 17 vans

12. **H**

13. Michael is taking a 465-mile train ride. If the train travels 31 miles per hour, how many hours will the ride last?

A. 15 hours

C. 14 hours

B. 16 hours

D. 13 hours

13. **A**

Chapter Test, Form 1B (continued)

8. $42 \overline{)258}$

F. 6 R12

H. 6 R6

G. 6 R9

I. 6

8. **H**

9. $51 \overline{)4,274}$

A. 93 R21

C. 84

B. 91

D. 83 R41

9. **D**

10. $78 \overline{)7,106}$

F. 91 R16

H. 91

G. 91 R8

I. 90

10. **G**

11. Melinda has a 598-page book. If she reads 26 pages each day, how many days will it take her to finish reading the book?

A. 20 days

C. 24 days

B. 23 days

D. 26 days

11. **B**

12. One hundred eighty students go on a field trip to the zoo. Each van can seat 10 students. Using the fewest number of vehicles possible, how many vans are needed?

F. 16 vans

H. 18 vans

G. 17 vans

I. 19 vans

12. **H**

13. Malia is taking a 407-mile train ride. If the train travels 37 miles per hour, how many hours will the ride last?

A. 12 hours

C. 13 hours

B. 11 hours

D. 14 hours

13. **B**

Chapter Test, Form 2A *(continued)*

9. $94 \overline{)4,986}$

A. 42 R2

B. 50 R6

C. 53 R4

D. 55

9. **C**

10. $98 \overline{)8,854}$

F. 80

G. 80 R54

H. 90

I. 90 R34

10. **I**

11. $6,655 \div 85 = \square$

A. 83

B. 78 R25

C. 78

D. 75

11. **B**

12. Brandy drives a total of 2,030 miles to visit her grandmother. If she drives an average of 58 miles per hour, how many hours will it take her to make the trip?

F. 35 hours

G. 36 hours

H. 39 hours

I. 40 hours

12. **F**

Read each question carefully. Write your answer on the line provided.

13. The school district needs buses for 1,092 students for a class trip. If each bus holds 84 students, how many buses will be needed?

13. **13 buses**

14. Forty-seven thousand people ride the city bus every day. On average, about how many people ride the bus each hour?

14. **2,000 people**

15. An entire chocolate cake has 7,200 calories. If the cake is equally divided into 12 pieces, how many calories are in each piece?

15. **600 calories**

16. A florist just received a shipment of 1,308 roses. How many bouquets of a dozen roses can the florist make using the shipment of roses?

16. **109 bouquets**

Chapter Test, Form 2B *(continued)*

9. $66 \overline{)5,562}$

A. 101 R2

C. 84 R18

B. 85 R18

D. 84

9. **C**

10. $74 \overline{)4,145}$

F. 56 R1

H. 57

G. 56 R9

I. 561

10. **F**

11. $8,713 \div 93 = \square$

A. 83

C. 93 R64

B. 93 R5

D. 94

11. **C**

12. Brad drives a total of 1,056 miles to visit his grandmother. If he drives an average of 48 miles per hour, how many hours will it take him to make the trip?

F. 22 hours

H. 20 hours

G. 21 hours

I. 19 hours

12. **F**

Read each question carefully. Write your answer on the line provided.

13. The school district needs buses for 1,012 students for a field trip. If each bus holds 92 students, how many buses will be needed?

13. **11 buses**

14. Thirty-six thousand people ride the city bus every day. On average, about how many people ride the bus each hour?

14. **1,500
people**

15. An entire chocolate cake has 5,320 calories. If the cake is equally divided into 14 pieces, how many calories are in each piece?

15. **380
calories**

16. A florist just received a shipment of 1,152 roses. How many bouquets of a dozen roses can the florist make using the shipment of roses?

16. **96
bouquets**

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

1. Estimate.
 $43,059 \div 62 = \square$

2. Estimate.
 $11,117 \div 96 = \square$

3. Estimate.
 $24,743 \div 54 = \square$

4. Estimate. $21 \overline{)79,156}$

5. Estimate. $16 \overline{)61,020}$

6. Estimate. $23 \overline{)46,733}$

7. Estimate. $298 \overline{)93,415}$

Divide.

8. $844 \div 76 = \square$

9. $901 \div 49 = \square$

10. $2,653 \div 61 = \square$

Sample answers given for Ex 1–7.

1. 700

2. 100

3. 500

4. 4,000

5. 3,000

6. 2,000

7. 300

8. 11 R8

9. 18 R19

10. 43 R30

Chapter Test, Form 3A (continued)

11. $85 \overline{)6,052}$

11. 71 R17

12. $77 \overline{)1,243}$

12. 16 R11

13. $91 \overline{)5,645}$

13. 62 R3

14. A teacher has 613 fliers to divide equally among 29 students. About how many fliers will each student receive?

14. about
20 fliers

15. A building measures 1224 feet tall. If each floor in the building measures 12 feet tall, how many floors are there in the building?

15. 102 floors

16. While on a field trip, the bus travels an average of 62 miles per hour. About how long will it take the bus to travel 132 miles?

16. about
2 hours

17. Antonio has 1,408 trading cards. A collector's box holds 44 cards. How many boxes will Antonio need to hold all of the cards?

17. 32 boxes

18. The school play earned \$11,364 in ticket sales. If the cost of each ticket is \$12, how many tickets were sold?

18. 947 tickets

19. The average life span of a swan is 7,300 days. How many years is this?

19. 20 years

20. Patricia is making pizzas. She has 174 pieces of pepperoni. She uses 36 pieces of pepperoni on the first pizza. If she uses the same amount on each pizza, does she have enough pepperoni to make 4 more pizzas?

20. no

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

1. Estimate.
 $79,402 \div 37 = \square$

2. Estimate.
 $18,409 \div 61 = \square$

3. Estimate.
 $61,095 \div 59 = \square$

4. Estimate. $18 \overline{)83,826}$

5. Estimate. $63 \overline{)12,588}$

6. Estimate. $42 \overline{)24,173}$

7. Estimate. $240 \overline{)96,078}$

Divide.

8. $957 \div 26 = \square$

9. $893 \div 85 = \square$

10. $4,115 \div 97 = \square$

Sample answers given for Ex 1–7.

1. 2,000

2. 300

3. 1,000

4. 4,000

5. 200

6. 600

7. 400

8. 36 R21

9. 10 R43

10. 42 R41

Chapter Test, Form 3B (continued)

11. $80 \overline{)5,550}$

11. **69 R30**

12. $79 \overline{)1,575}$

12. **19 R74**

13. $92 \overline{)6,640}$

13. **72 R16**

14. A teacher has 902 fliers to divide equally among 31 students. About how many fliers will each student receive?

14. **about
30 fliers**

15. A building measures 1,344 feet tall. If each floor in the building measures 14 feet tall, how many floors are there in the building?

15. **96 floors**

16. While on a field trip, the bus travels an average of 48 miles per hour. About how long will it take the bus to travel 151 miles?

16. **about
3 hours**

17. Arnold has 1,066 trading cards. Each album holds 26 cards. How many albums does Arnold need to hold all of his cards?

17. **41 albums**

18. The school play earned \$11,271 in ticket sales. If the cost of each ticket is \$13, how many tickets were sold?

18. **867 tickets**

19. The average life span of a beluga whale is 16,790 days. How many years is this?

19. **46 years**

20. Pamela is making pizzas. She has 112 pieces of pepperoni. She uses 29 pieces of pepperoni on the first pizza. If she uses the same amount on each pizza, does she have enough pepperoni to make 4 more pizzas?

20. **no**

Standardized Test Practice

Read each question. Fill in the correct answer.

1. There are 481 students hiking at Black Mountain Trail. There are 24 adults, and each adult is assigned the same number of students. About how many students are assigned to each adult?



- (A) about 21 students
- (B) about 20 students
- (C) about 17 students
- (D) about 12 students

2. There are 576 crickets divided equally in 12 plastic containers. How many crickets are in each container?



- (F) 32 crickets
- (G) 48 crickets
- (H) 50 crickets
- (I) 60 crickets

3. Cassie has 396 pictures to put in her album. If her album has 44 pages, how many pictures can she put on each page?



- (A) 12 pictures
- (B) 10 pictures
- (C) 9 pictures
- (D) 8 pictures

4. The gym teacher spent \$165 on exercise balls. If each exercise ball cost \$11 dollars, how many exercise balls did he buy?



- (J) 15 exercise balls
- (K) 16 exercise balls
- (L) 20 exercise balls
- (M) 65 exercise balls

5. The Grand Hotel has 15 floors and a total of 1,005 rooms. If each floor has the same number of rooms, how many rooms are on each floor?

- (A) 70 rooms
- (B) 67 rooms
- (C) 65 rooms
- (D) 57 rooms

6. Alyssa worked 216 hours last year. If she worked the same number of hours each month, how many hours did she work each month?

- (F) 20 hours
- (G) 19 hours
- (H) 18 hours
- (I) 17 hours

Standardized Test Practice *(continued)*

7. William went to the store with his mother. He wants to buy a small action figure that costs 94¢. The number of coins in his pocket is shown in the table below. How many quarters does he have?

Number of Coins	
Quarter	?
Dime	3
Nickel	2
Penny	4

- (A) 1 quarter
- (B) 2 quarters
- (C) 3 quarters
- (D) 4 quarters

8. A jar of peanut butter has 27,306 calories. If there are 18 servings in each jar, how many calories are in one serving?

- (F) 1,200 calories
- (G) 1,463 calories
- (H) 1,517 calories
- (I) 1,681 calories



9. A theater earned \$87,890 in ticket sales. If each ticket cost \$55, how many tickets were sold?

- (A) 2,000 tickets
- (B) 1,598 tickets
- (C) 1,423 tickets
- (D) 181 tickets

10. Marcella bought a house for \$87,264. If she makes 96 equal payments, how much in dollars will she pay each month?

- (F) \$809
- (G) \$909
- (H) \$1,000
- (I) \$1,009

11. Tami drinks 2,916 glasses of water in one year. How many glasses of water does she drink in 7 months?



- (A) 1,701 glasses
- (B) 1,170 glasses
- (C) 1,071 glasses
- (D) 417 glasses



Chapter Assessment Answer Key

Extended-Response Test, Page 104 *Sample Answers*

In addition to the scoring rubric found on page 105, the following sample answers may be used as guidance in evaluating open-ended assessment items.

- 1. a.** Round 245 to the nearest hundred and 41 to the nearest ten.
 $200 \div 40 = 5$
- b.** Divide 240 by 40. 240 and 40 are compatible numbers because
 $24 \div 4 = 6$.
- c.** 5 R40; Yes, Colton has enough money to buy 4 new wheels.
- d.** No, the estimates are not the same. The estimate found by using compatible numbers is closer to the exact answer.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

**Two hundred thirty-four people are going out to dinner.
There are 18 tables.**

1. Use mental math to estimate about how many people are at each table.

Sample answer: 10 people

2. Tell how you got your answer.

Sample answer: $200 \div 20 = 10$

3. Is your estimate smaller or larger than the exact answer?

Sample answer: smaller

4. Is it possible to have more than one estimate for this problem? Explain.

Sample answer: Yes; you could round 234 up to 300 and 18 down to 15, and you would get an estimate of 20 instead of 10.

Use base ten blocks to find $234 \div 18$.

5. How many tens and how many ones are in each group?

Sample answer: 1 ten and 3 ones

6. Write a division problem based on what we have talked about above.

$234 \div 18 = 13$

Oral Assessment *(continued)*

7. How can you check the reasonableness of your quotient?

Sample answer: Multiply your quotient by the divisor, or compare your answer with the estimate.

8. How do you know that your quotient is reasonable?

Sample answer: It is close to the estimate.

McKenna solved $579 \div 21$ and got 26 R33 as her answer.

9. Is her answer correct?

no

10. Explain your answer.

Sample answer: The remainder is larger than the divisor, so her answer is not correct.

11. Find $579 \div 21$.

27 R12

12. Is your answer reasonable?

Sample answer: Yes: the estimated answer is $600 \div 20 = 30$, and 27 R12 is close to 30.

Am I Ready?

Practice

Name the place-value position of each underlined digit.

1. $\underline{6}3$ **ones** 2. $0.\underline{2}$ **tenths** 3. $\underline{5},107$ **thousands**

4. $8.\underline{24}$ **hundredths** 5. $1,\underline{3}89$ **hundreds** 6. $\underline{9}5$ **tens**

Add.

7. $59 + 34 = \underline{93}$ 8. $18 + 7 = \underline{25}$ 9. $40 + 26 = \underline{66}$

10. $143 + 17 = \underline{160}$ 11. $9 + 5 + 8 = \underline{22}$ 12. $18 + 6 + 7 = \underline{31}$

13. Allie has 3 pairs of white socks, 5 pairs of blue socks, and 2 pairs of pink socks. Wade has 8 pairs of white socks, 1 pair of brown socks, and 4 pairs of black socks. How many more pairs of socks does Wade have than Allie?

3 pairs

Round each number to the underlined place.

14. $\underline{9}76$ **980** 15. $\underline{4}28$ **400** 16. $3,\underline{1}59$ **3,160**

17. $\underline{6}25$ **630** 18. $1,\underline{8}37$ **1,800** 19. $2,\underline{8}16$ **2,820**

Am I Ready?

Review

Addition

Step 1

$$\begin{array}{r} 1 \\ 185 \\ + 347 \\ \hline 2 \end{array}$$

Add the ones.

Add. 5 ones + 7 ones = 12 ones
 12 ones = 1 ten and 2 ones
 Write a 2 in the ones place of the sum.
 Regroup the tens.

Step 2

$$\begin{array}{r} 11 \\ 185 \\ + 347 \\ \hline 32 \end{array}$$

Add the tens.

Add. 1 ten + 8 tens + 4 tens = 13 tens
 13 tens = 1 hundred and 3 tens.
 Write a 3 in the tens place of the sum.
 Regroup the hundreds.

Step 3

$$\begin{array}{r} 11 \\ 185 \\ + 347 \\ \hline 532 \end{array}$$

Add the hundreds.

Add. 1 hundred + 1 hundred + 3 hundreds = 5 hundreds
 Write a 5 in the hundreds place of the sum.

Add.

$$\begin{array}{r} 1. \quad 28 \\ \quad + 96 \\ \hline \quad \mathbf{124} \end{array}$$

$$\begin{array}{r} 2. \quad 64 \\ \quad + 87 \\ \hline \quad \mathbf{151} \end{array}$$

$$\begin{array}{r} 3. \quad 83 \\ \quad + 49 \\ \hline \quad \mathbf{132} \end{array}$$

$$\begin{array}{r} 4. \quad 48 \\ \quad + 45 \\ \hline \quad \mathbf{93} \end{array}$$

$$\begin{array}{r} 5. \quad 28 \\ \quad + 16 \\ \hline \quad \mathbf{44} \end{array}$$

$$\begin{array}{r} 6. \quad 95 \\ \quad + 27 \\ \hline \quad \mathbf{122} \end{array}$$

$$\begin{array}{r} 7. \quad 405 \\ \quad + 221 \\ \hline \quad \mathbf{626} \end{array}$$

$$\begin{array}{r} 8. \quad 529 \\ \quad + 192 \\ \hline \quad \mathbf{721} \end{array}$$

$$\begin{array}{r} 9. \quad 321 \\ \quad + 113 \\ \hline \quad \mathbf{434} \end{array}$$

Am I Ready?

Apply

Solve.

1. Tyrell spent \$4 on a sandwich, \$2 on chips, and \$2 on a drink. Jackson spent \$3 on a vegetable, \$3 on a salad, and \$1 on a drink. How much more did Tyrell spend than Jackson?

\$1

2. The Orta family has 5 fish, 2 birds, and 1 dog. The Phillips family has 1 cat, 1 dog, and 3 fish. How many more pets does the Orta family have than the Phillips family?

3 pets

3. Nick's batting average during last year's baseball season was .318. What is the place-value position of the 1 in .318?

hundredths

4. Alonda jogs 5.92 miles each day. What is the place-value position of the 9 in 5.92?

tenths

5. Su Ling likes the rock-climbing wall at the gym. Her highest climb so far is 8.47 meters. What is the place-value position of the 8 in 8.47?

ones

6. Janelle made sandwiches for a party. She made 11 chicken sandwiches, 8 cheese sandwiches, and 8 peanut butter sandwiches. How many sandwiches did she make in all?

27 sandwiches

7. Virgil practiced the piano 28 minutes on Wednesday and 25 minutes on Friday. How many minutes did he practice in all?

53 min

8. Karen opens a bag of mixed nuts to eat for a snack. She counts 4 pecans, 5 almonds, and 14 peanuts. How many nuts does Karen count in all?

23 nuts

Diagnostic Test

Name the place-value position of each underlined digit.

1. 83

2. 296

3. 14.63

4. 27

5. 8,594

6. 5.943

1. ones

2. hundreds

3. tenths

4. tens

5. thousands

6. hundredths

Add.

7. $15 + 36 =$

8. $99 + 66 =$

9. $358 + 34 =$

10. $411 + 59 =$

11. $362 + 201 =$

12. $452 + 169 =$

13. Nadia has 14 board games, 35 marbles, and 26 stuffed animals. Robert has 18 video games, 32 toy cars, and 28 model airplanes. How many more toys does Robert have than Nadia?

7. 51

8. 165

9. 392

10. 470

11. 563

12. 621

13. 3 toys

Round each number to the underlined place.

14. 39

15. 268

16. 9,340

17. 54,176

14. 40

15. 270

16. 9,000

17. 54,200

Pretest

Round each decimal to the nearest one. Then add or subtract.

1. $6.3 + 5.5 =$
2. $18.9 - 13.4 =$
3. $4.4 + 2.8 =$
4. $7.89 - 3.12 =$
5. $160.7 + 40.9 =$

1. **12**
2. **6**
3. **7**
4. **5**
5. **202**

Add or subtract.

6. $3.96 - 1.42 =$
7. $10.67 + 15.11 =$
8. $0.77 - 0.03 =$
9. $0.3 + 1.45 =$
10. $103.5 - 64.3 =$
11. $341.68 + 104.34 =$

6. **2.54**
7. **25.78**
8. **0.74**
9. **1.75**
10. **39.2**
11. **446.02**

Identify the addition property used to rewrite each problem.

12. $56 + 7 = 7 + 56$
13. $(14 + 6) + 17 = 14 + (6 + 17)$

12. **Commutative Property**
13. **Associative Property**

Solve.

14. Sheila wants to purchase a video game that costs \$43.49. She has \$19.37 and receives \$22.50 for baby sitting. Does she have enough money to purchase the game? Explain.
15. Jamie ran 1.4 miles on Monday and 2.3 miles on Wednesday. How many total miles did he run on Monday and Wednesday?

14. **no, she only has \$41.87**
15. **3.7 miles**

Check My Progress (Lessons 1 through 3)**Round each decimal to the place indicated.**

1. 32.62; tenths 1. 32.6
2. 43.0129; hundredths 2. 43.01
3. 52.87; ones 3. 53

Round each decimal to the nearest one. Then add or subtract.

4. $3.7 + 2.4 =$ 4. 6
5. $93.5 - 52.6 =$ 5. 41
6. $16.7 + 8.84 =$ 6. 26

Determine whether you need an estimate or an exact answer. Then solve.

7. **exact; \$45.74** 7. exact; \$45.74
8. **estimate; \$560** 8. estimate; \$560
7. Aubrey wants to buy a pair of jeans for \$29.99 and a shirt for \$15.75. How much money does Aubrey need to buy both items?
8. A family rents a cottage for \$79.95 a day for 7 days. About how much does the family pay for the cottage?

Check My Progress *(Lessons 4 through 7)*

Add. Use base-ten blocks. Draw the result in the table.

1. $0.67 + 0.38 =$

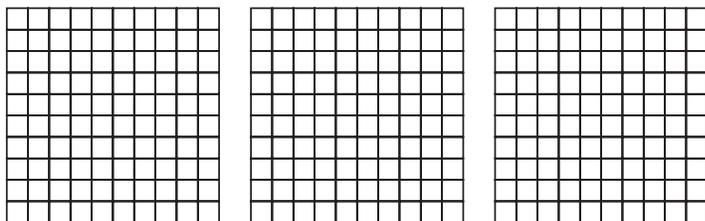
Ones	Tenths	Hundredths

See students'

1. work; 1.05

Add. Use decimal models.

2. $1.04 + 1.35 =$



See students'

2. work; 2.39

Add.

3. $5.93 + 10.42 =$

3. 16.35

4. $0.7 + 0.33 =$

4. 1.03

5. $11.04 + 0.25 =$

5. 11.29

Use properties of addition to find each sum mentally. Show your steps and identify the properties that you used.

6. $13 + 29 + 7 =$

**Sample answer: $13 + 7 + 29$ Commutative
 $(13 + 7) + 29$ Associative
 $20 + 29 = 49$**

6. 49; See students' work. Sample answer given.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the best estimate?

$$4.97 + 13.02 =$$

A. 14

B. 16

C. 18

D. 19

1. **C**

2. Which is the best estimate?

$$9.6 - 6.2 =$$

F. 16

G. 15

H. 4

I. 3

2. **H**

3. Which is the best estimate?

$$5.07 - 2.56 =$$

A. 2

B. 3

C. 7

D. 8

3. **A**

4. Jan's lunch bill is \$5.74. She pays with a \$10 bill.

About how much change does she receive?

F. \$4

G. \$5

H. \$15

I. \$16

4. **F**

What is the value of each of the following?

5. 5.45

$$+ 0.03$$

A. 8.45

B. 5.75

C. 5.49

D. 5.48

5. **D**

6. 8.00

$$+ 2.72$$

F. 8.27

G. 10.72

H. 10.76

I. 10.96

6. **G**

Chapter Test, Form 1A *(continued)*

7. Which property is shown below?

$$864.17 + 0 = 864.17$$

- A.** Associative Property **C.** Identity Property
B. Commutative Property **D.** Distributive Property

7. **C**

8. Which property is shown below?

$$(12 + 16) + 34 = 12 + (16 + 34)$$

- F.** Associative Property **H.** Identity Property
G. Commutative Property **I.** Distributive Property

8. **F**

What is the value of each of the following?

9. 8.8

$$\underline{\quad - 6.2 \quad}$$

- A.** 2.6 **C.** 3.1
B. 2.7 **D.** 15

9. **A**

10. 10.57

$$\underline{\quad - 4.25 \quad}$$

- F.** 6.32 **H.** 8.72
G. 6.33 **I.** 14.82

10. **F**

11. 1.38

$$\underline{\quad - 0.66 \quad}$$

- A.** 0.62 **C.** 1.92
B. 0.72 **D.** 2.05

11. **B**

12. The science club raised \$98.75 to buy bird feeders and birdseed to place outside the classroom. Club members bought one bag of bird seed for \$2.75. Each bird feeder costs \$12. How many bird feeders can the club buy?

- F.** 6 **H.** 8
G. 7 **I.** 9

12. **H**

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the best estimate?

$$5.82 + 14.03 =$$

A. 19

B. 20

C. 21

D. 22

1. **B**

2. Which is the best estimate?

$$8.5 - 7.1 =$$

F. 1

G. 2

H. 3

I. 4

2. **G**

3. Which is the best estimate?

$$9.07 - 3.67 =$$

A. 3

B. 4

C. 5

D. 6

3. **C**

4. June's lunch bill is \$4.64. She pays with a \$10 bill. About how much change does June receive?

F. \$3

G. \$4

H. \$5

I. \$6

4. **H**

What is the value of each of the following?

5. 4.34

$$+ 0.02$$

A. 6

B. 4.5

C. 4.54

D. 4.36

5. **D**

6. 7.01

$$+ 3.84$$

F. 3.17

G. 4.83

H. 10.81

I. 10.85

6. **I**

Chapter Test, Form 1B *(continued)*

7. Which property is shown below?

$$(21 + 23) + 25 = 21 + (23 + 25)$$

- A. Associative Property C. Identity Property
 B. Commutative Property D. Distributive Property

7. **A**

8. Which property is shown below?

$$14 + 17 + 46 = 14 + 46 + 17$$

- F. Associative Property H. Identity Property
 G. Commutative Property I. Distributive Property

8. **G**

What is the value of each of the following?

9. 9.9

$$\begin{array}{r} 9.9 \\ - 5.3 \\ \hline \end{array}$$

- A. 3.3 C. 3.6
 B. 3.5 D. 4.6

9. **D**

10. 11.68

$$\begin{array}{r} 11.68 \\ - 3.47 \\ \hline \end{array}$$

- F. 8.01 H. 9.21
 G. 8.21 I. 15.15

10. **G**

11. 2.47

$$\begin{array}{r} 2.47 \\ - 0.77 \\ \hline \end{array}$$

- A. 1.70 C. 2.30
 B. 1.30 D. 3.25

11. **A**

12. The history club has \$171 with which to buy historical fiction books. Club members have already spent \$15 on bookmarks. If each book costs \$12, how many books can the club buy?

- F. 12 H. 14
 G. 13 I. 15

12. **G**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the best estimate?

$$10.47 + 42.5 =$$

A. 54

B. 53

C. 52

D. 51

1. **B**

2. Which is the best estimate?

$$57.69 - 41.35 =$$

F. 16

G. 17

H. 98

I. 99

2. **G**

3. Ada's lunch costs \$14.32. She hands the cashier \$20. About how much change will Ada receive?

A. \$4

B. \$5

C. \$6

D. \$7

3. **C**

4. Last week, the Clearwater CD company had sales of \$1,158.79. This week, the company had sales of \$6,997.05. Which is the best estimate of the company's total sales for both weeks?

F. \$6,000

G. \$7,000

H. \$8,000

I. \$9,000

4. **H**

What is the value of each of the following?

5. 52.7

$$+ 9.13$$

A. 43.56

B. 59

C. 61.21

D. 61.83

5. **D**

6. $64.39 + 21.57 =$

F. 42.82

G. 85.86

H. 85.96

I. 86

6. **H**

7. $58.99 + 4.01 =$

A. 63.00

B. 62

C. 54.97

D. 52.90

7. **A**

Chapter Test, Form 2A *(continued)*

8. Which property is shown below?

$$(52 + 68) + 38 = 52 + (68 + 38)$$

F. Associative Property

G. Commutative Property

H. Identity Property

I. Distributive Property

8. **F**

9. Which property is shown below?

$$935.82 + 0 = 935.82$$

A. Associative Property

B. Commutative Property

C. Identity Property

D. Distributive Property

9. **C**

Read each question carefully. Write your answer on the line provided.

What is the value of each of the following?

10.
$$\begin{array}{r} 53.39 \\ - 2.54 \\ \hline \end{array}$$

10. **50.85**

11.
$$\begin{array}{r} 82.4 \\ - 13.5 \\ \hline \end{array}$$

11. **68.9**

12. $7 - 4.68 = \square$

12. **2.32**

13. The coach recorded how fast his runners ran 1 mile. Eric ran a mile in 10.84 minutes, Kay ran a mile in 12.79 minutes, and Rosie ran a mile in 9.58 minutes. How many more minutes did Eric run than Rosie?

13. **1.26 minutes**

14. Bailey spent \$12.25 at the arcade on Saturday and \$9.50 at the arcade on Sunday. How much money did Bailey spend altogether?

14. **\$21.75**

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the best estimate?

$$11.36 + 52.6 =$$

A. 42

B. 63

C. 64

D. 65

1. **C**

2. Which is the best estimate?

$$69.58 - 34.26 =$$

F. 36

G. 37

H. 103

I. 104

2. **F**

3. Adrienne's lunch cost \$13.16. She hands the cashier \$20.

About how much change does Adrienne receive?

A. \$6

B. \$7

C. \$8

D. \$9

3. **B**

4. Last week, the Tasha Cola company had sales of \$2,346.87. This week, the company had sales of \$8,867.14. Which is the best estimate of the company's total sales for both weeks?

F. \$6,000

G. \$9,000

H. \$10,000

I. \$11,000

4. **I**

What is the value of each of the following?

5. 63.8

$$+ 8.12$$

A. 55.67

B. 61.72

C. 71.92

D. 72.71

5. **C**

6. $73.28 + 32.48 =$

F. 40.8

G. 101.20

H. 104.76

I. 105.76

6. **I**

7. $69.77 + 5.02 =$

A. 74.79

B. 74.98

C. 75.75

D. 75.79

7. **A**

Chapter Test, Form 2B (continued)

8. Which property is shown below?

$$(64 + 79) + 48 = 64 + (79 + 48)$$

F. Associative Property

H. Identity Property

G. Commutative Property

I. Distributive Property

8. **F**

9. Which property is shown below?

$$745.96 + 0 = 745.96$$

A. Associative Property

C. Identity Property

B. Commutative Property

D. Distributive Property

9. **C** **Read each question carefully. Write your answer on the line provided.****What is the value of each of the following?**

10.
$$\begin{array}{r} 42.28 \\ - 3.64 \\ \hline \end{array}$$

10. **38.64**

11.
$$\begin{array}{r} 73.2 \\ - 19.5 \\ \hline \end{array}$$

11. **53.7**

12. $9 - 5.79 = \square$

12. **3.21**

13. The coach recorded how fast his runners ran 1 mile. Emmett ran a mile in 9.73 minutes, Kate ran a mile in 10.87 minutes, and Robin ran a mile in 8.46 minutes. How many more minutes did Emmett run than Robin?

13. **1.27 minutes**

14. Jenna spent \$7.75 at the arcade on Friday and \$11.50 at the arcade on Saturday. How much money did Jenna spend altogether?

14. **\$19.25**

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Sample answers given for Ex 1–3.

1. Estimate.

$2.3 + 3.8 =$

1. 2 + 4 = 6

2. Estimate.

$69.58 - 32.24 =$

2. 70 - 32 = 38

3. Felix's dinner costs \$16.49. Felix pays with a \$20 bill. About how much change does he receive? Show your work.

3. \$20 - \$16 = \$4

Add.

4. $5.3 + 0.96 =$

4. 6.26

5. $48.6 + 7.22 =$

5. 55.82

6. $71.29 + 43.68 =$

6. 114.97

7. $64.87 + 5.01 =$

7. 69.88

8. Identify the addition property shown below.

$16 + 29 + 44 = 16 + 44 + 29$

8. Commutative Property

9. Identify the addition property shown below.

$(83 + 52) + 46 = 83 + (52 + 46)$

9. Associative Property

10. Identify the addition property shown below.

$865.72 + 0 = 865.72$

10. Identity Property

Chapter Test, Form 3A (continued)**Subtract.**

11. $64.28 - 3.67 = \square$

11. 60.61

12. $73.3 - 19.6 = \square$

12. 53.7

13. $9 - 5.41 = \square$

13. 3.59

14. On Monday, Tarmac Jean Company earned \$202.19. On Tuesday, the company earned \$186.62. About how much did Tarmac Jean Company earn in all? Show your work.

Sample answer:
14. $\frac{\$202 + \$187}{\$389}$

15. Company A has a budget of \$13.76 million and Company B has a budget of \$24.31 million. What is the difference between the two if each budget is rounded to the nearest tenth of a million?

15. \$10.5 million

16. Lamar has \$28. He spent \$13.28 on school supplies. How much money does Lamar have left?

16. \$14.72

17. The coach recorded how fast his runners ran 1 mile. Luisa ran a mile in 8.34 minutes, Angie ran a mile in 8.73 minutes, and Rafael ran a mile in 9.27 minutes. How much faster did Luisa run than Rafael?

17. 0.93 minute

18. Last year, Calvin's batting average was 0.37. Derek's batting average was 0.29. What was the difference in their averages?

18. 0.08

19. Kim purchased 2.33 yards of satin fabric and 3.12 yards of flannel fabric. How many total yards of fabric did she purchase?

19. 5.45 yards

20. Katrina bought a pair of jeans for \$39.29 and a sweater for \$46.54. She received \$14.17 in change. How much money did Katrina have originally?

20. \$100

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

1. Estimate.

$$4.9 + 2.1 =$$

2. Estimate.

$$78.69 - 23.35 =$$

3. Ama's dinner costs \$17.38. Ama pays with a \$20 bill. About how much change does he receive? Show your work.

Add.

4. $8.5 + 0.84 =$

5. $57.7 + 9.32 =$

6. $92.39 + 64.78 =$

7. $73.96 + 6.02 =$

8. Identify the addition property used to rewrite the problem below.

$$36 + 48 + 52 = 48 + 52 + 36$$

9. Identify the addition property used to rewrite the problem below.

$$(74 + 63) + 35 = 74 + (63 + 35)$$

10. Identify the addition property used to rewrite the problem below.

$$974.63 + 0 = 974.63$$

Sample answers given for Ex 1–3.

1. **5 + 2 = 7**

2. **79 - 23 = 56**

3. **\$20 - \$17 = \$3**

4. **9.34**

5. **67.02**

6. **157.17**

7. **79.98**

8. **Commutative Property**

9. **Associative Property**

10. **Identity Property**

Chapter Test, Form 3B (continued)**Subtract.**

11. $73.46 - 4.75 = \square$

11. 68.71

12. $94.2 - 18.7 = \square$

12. 75.5

13. $8 - 6.32 = \square$

13. 1.68

14. On Monday, Bonus Book Company earned \$303.28. On Tuesday, the company earned \$295.73. About how much did Bonus Book Company earn in all? Show your work.

Sample answer:
14. $\$300 + \$300 =$
\$600

15. Company A has a budget of \$23.87 million and Company B has a budget of \$14.22 million. What is the difference between the two budgets if each is rounded to the nearest tenth of a million?

15. \$9.7 million

16. Abby has \$38. She spent \$29.37 on a new sweatshirt. How much does Abby have left?

16. \$8.63

17. The coach recorded how fast his runners ran 1 mile. Luann ran a mile in 9.26 minutes, Anne ran a mile in 11.64 minutes, and Rubin ran a mile in 10.36 minutes. How much faster did Luann run than Rubin?

17. 1.1 minutes

18. Last year, Dustin's batting average was 0.32. Scott's batting average was 0.27. What was the difference in their averages?

18. 0.05

19. Marco purchased 1.25 yards of flannel fabric and 3.15 yards of fleece fabric. How many total yards of fabric did Marco purchase?

19. 4.4 yards

20. Carter bought a pair of jeans for \$49.99 and a shirt for \$23.59. He received \$6.42 in change. How much money did Carter have originally?

20. \$80

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. Herman finished all 7 math questions in 35 minutes. If each question took the same amount of time, how long did it take Herman to complete each question?

A 5 min
 B 6 min
 C 7 min
 D 8 min

4. Zina is reading a 968-page book. She wants to finish the book in 8 days. How many pages does Zina need to read each day?

F 100 days
 G 121 days
 H 125 days
 I 131 days

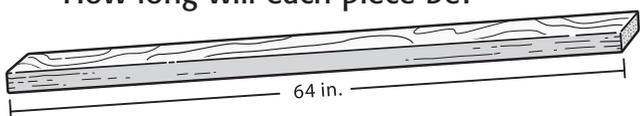
2. Kathy and her friends are playing a game. Kathy divided all 20 playing cards equally among 4 players. How many cards did each player receive?

F 3 cards
 G 4 cards
 H 5 cards
 I 6 cards

5. Jasper completed the first race in 2.3 minutes and the second race in 2.4 minutes. About how many minutes did it take for him to finish the two races?

A 5 min
 B 6 min
 C 7 min
 D 8 min

3. Isaac is helping his mom build a tree house. Isaac is dividing the board shown below into 8 equal pieces. How long will each piece be?



A 8 in.
 B 6 in.
 C 4 in.
 D 2 in.

6. Samantha has \$2.21 in her pants pocket. She finds \$2.53 in her coat pocket. About how much money does she have altogether?

F \$3.00
 G \$4.00
 H \$5.00
 I \$6.00

Standardized Test Practice (continued)

7. Omar has saved a total of \$3,168 in the past year. If he saved the same amount each month, how much money did Omar save each month?

A \$264
 B \$265
 C \$270
 D \$275

8. Tora bought a notebook for \$1.19, a pack of pencils for \$0.89, and a new backpack for \$13.99. To the nearest dollar, about how much did Tora spend in all?

F \$15
 G \$16
 H \$17
 I \$18

9. Tom paid \$3.49 for a sandwich, \$1.25 for pretzels, and \$2.25 for a drink. How much did Tom pay in all?

A \$7.99
 B \$7.00
 C \$6.99
 D \$6.00

10. Below are the prices for gasoline at three different stations.

Unleaded Gasoline Prices	
Station A	\$2.79
Station B	\$2.49
Station C	\$2.44

How much more is the gasoline at Station A than at Station C?

F \$3.00
 G \$0.35
 H \$0.30
 I \$0.03

11. The library is 5.4 miles from Roxanne's house. The school is 9.3 miles from Roxanne's house. How much farther is the school than the library from Roxanne's house?

A 4.0 miles
 B 3.9 miles
 C 3.1 miles
 D 2.9 miles

12. Kira purchases a book that costs \$26.95. She pays for the book with \$30. How much change should she receive?

A \$3.05
 B \$3.00
 C \$2.05
 D \$1.05



Chapter Assessment Answer Key

Extended-Response Test, Page 130 *Sample Answers*

In addition to the scoring rubric found on page 131, the following sample answers may be used as guidance in evaluating open-ended assessment items.

- 1. a.** You estimate sums or differences of decimals by rounding each decimal, and then adding or subtracting.
 - b.** If both decimals are rounded up, the sum or difference will be an overestimate. If both decimals are rounded down, the sum or difference will be an underestimate.
 - c.** When calculating the distance driven.
- 2.** Sample answer: The Commutative Property states that the order in which numbers are added does not change the sum. The Associative property states that the way in which the numbers are grouped does not change the sum.
- 3. a.** The cost of a new CD is \$12.49 and the cost of a new CD case is \$8.43. What is the total cost of the CD and CD case? The total cost of the CD and CD case is \$20.92.
 - b.** Carter has \$35.05 and spends \$12.40 on groceries. How much money does he have left? He has \$22.65 left.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

Show the student the following menu.

Lunch Menu	
Item	Cost
Milk	\$0.85
Fruit	\$1.25
Pizza	\$1.35
Salad	\$2.45
Sandwich	\$2.95
Taco	\$1.55
Juice box	\$0.95
Yogurt	\$0.85

1. Round the cost of a yogurt and milk. Then add the two items together. If you had \$2, would you have enough to pay for them?

yes

2. Tell how you got your answer.

The yogurt is about \$1. Milk is about \$1.

Added together, the cost is about \$2.

3. What is the total cost of a juice box and a sandwich?

\$3.90

4. Tell how you got your answer.

Sample answer: I found the cost of a juice box and sandwich on the table. Then I added \$0.95 and \$2.95 to find the total cost.

Oral Assessment *(continued)*

5. What is the total cost of milk, fruit, and pizza?

\$3.45

6. Tell how you got your answer.

Sample answer: I found the cost of milk, fruit, and pizza on the table. Then I added \$0.85, \$1.25, and \$1.35 to find the total cost.

7. How much more is a sandwich than a yogurt?

\$2.10

8. Tell how you got your answer.

Sample answer: I found the cost of a sandwich and a yogurt on the table. Then I subtracted \$0.85 from \$2.95 to find the difference in cost.

9. If you had \$6, would you have enough money to buy a salad and a sandwich?

yes

10. Tell how you got your answer.

Sample answer: I found the cost of a salad and a sandwich on the table. Then I added \$2.45 and \$2.95 to find the total cost of \$5.40. Since \$5.40 is less than \$6, I would have enough money.

11. What is the total cost of 2 yogurts, 1 milk, and 1 taco?

\$4.10

12. Tell how you got your answer.

Sample answer: I found the cost of a yogurt, milk, and taco on the table. Then I added \$0.85, \$0.85, \$0.85, and \$1.55 to find the total cost.

Am I Ready?

Practice

Multiply.

1. $17 \times 42 = \underline{\mathbf{714}}$ 2. $29 \times 13 = \underline{\mathbf{377}}$ 3. $680 \times 10 = \underline{\mathbf{6,800}}$

4. $31 \times 28 = \underline{\mathbf{868}}$ 5. $54 \times 20 = \underline{\mathbf{1,080}}$ 6. $206 \times 32 = \underline{\mathbf{6,592}}$

7. Skirts are on sale for \$16 each. How much will 3 skirts cost?

\$48

8. Sydney bought 6 tickets to an amusement park for his family. Each ticket cost \$18. How much did Sydney spend?

\$108

Divide.

9. $105 \div 15 = \underline{\mathbf{7}}$ 10. $95 \div 5 = \underline{\mathbf{19}}$ 11. $88 \div 11 = \underline{\mathbf{8}}$

12. $1,200 \div 10 = \underline{\mathbf{120}}$ 13. $472 \div 8 = \underline{\mathbf{59}}$ 14. $120 \div 5 = \underline{\mathbf{24}}$

15. Abby ordered 4 new bats for the girls' softball team. The cost before tax was \$104. If each bat cost the same amount, how much did each bat cost?

\$26

Round each decimal to the nearest whole number.

16. $9.7 = \underline{\mathbf{10}}$ 17. $6.2 = \underline{\mathbf{6}}$ 18. $3.6 = \underline{\mathbf{4}}$

19. $2.27 = \underline{\mathbf{2}}$ 20. $18.78 = \underline{\mathbf{19}}$ 21. $8.4 = \underline{\mathbf{8}}$

Am I Ready?

Review

Multiply 37×12 .

Step 1 Multiply 37 by 2.

$$\begin{array}{r} 1 \\ 37 \\ \times 12 \\ \hline 74 \end{array}$$

$2 \times 7 \text{ ones} = 14 \text{ ones}$

$2 \times 3 \text{ tens} = 6 \text{ tens}$

$14 \text{ ones} = 1 \text{ ten and } 4 \text{ ones}$

$6 \text{ tens} + 1 \text{ ten} = 7 \text{ tens}$

Step 2 Multiply 37 by 10.

$$\begin{array}{r} 37 \\ \times 12 \\ \hline 74 \\ + 370 \\ \hline \end{array}$$

$10 \times 7 \text{ ones} = 70 \text{ ones}$

$10 \times 3 \text{ tens} = 30 \text{ tens}$

$70 \text{ ones} = 7 \text{ tens and } 0 \text{ ones}$

$30 \text{ tens} + 7 \text{ tens} = 37 \text{ tens}$

$37 \text{ tens} = 3 \text{ hundreds and } 7 \text{ tens}$

Step 3 Add.

$$\begin{array}{r} 37 \\ \times 12 \\ \hline 74 \\ + 370 \\ \hline 444 \end{array}$$

Multiply.

1. $48 \times 47 = \underline{2,256}$ 2. $66 \times 38 = \underline{2,508}$ 3. $83 \times 10 = \underline{830}$

4. $256 \times 24 = \underline{6,144}$ 5. $18 \times 16 = \underline{288}$ 6. $20 \times 19 = \underline{380}$

7. $12 \times 59 = \underline{708}$ 8. $491 \times 62 = \underline{30,442}$ 9. $74 \times 31 = \underline{2,294}$

10. $95 \times 27 = \underline{2,565}$ 11. $543 \times 10 = \underline{5,430}$ 12. $607 \times 15 = \underline{9,105}$

Am I Ready?

Apply

Solve.

1. Jason bought 3 sandwich trays for a party. If each tray cost \$24, how much did Jason spend in all?

\$72

2. Sabrina practiced the violin 45 minutes each day for 6 days. How many minutes did she practice in all?

270 min

3. Kelsey opened a bag of marbles that included red, yellow, green, and blue marbles. There were 144 marbles in all. If there was an equal number of each color of marble, how many of each color of marble were in the bag?

36

4. Thalia spent a total of \$63 last month for lunch at school. Each lunch cost the same amount. If she bought her lunch 21 times, how much is a lunch at Thalia's school?

\$3

5. Mason buys a computer game that costs \$19. He wants to save his money to buy 6 more games at that amount. How much money does Mason need to save?

\$114

6. Natalie donated 10 DVDs to a charity fundraiser. The value of the DVDs was \$130. If each DVD had the same value, what was the value of each DVD?

\$13

7. Andrew bought a bicycle to ride on his paper route. He paid \$99.32 for the bicycle. What is the price of the bicycle, rounded to the nearest dollar?

\$99

8. Jalissa ran 7.8 kilometers in a race. About how many kilometers did she run, rounded to the nearest whole number?

8 km

Diagnostic Test

Multiply.

1. $15 \times 30 =$

1. 450

2. $460 \times 10 =$

2. 4,600

3. $52 \times 40 =$

3. 2,080

4. $12 \times 26 =$

4. 312

5. Janelle is selling books for \$12 each. How much will she make if she sells 6 books?

5. \$72

Divide.

6. $117 \div 9 =$

6. 13

7. $75 \div 5 =$

7. 15

8. $496 \div 8 =$

8. 62

9. $42 \div 6 =$

9. 7

10. Tarrin spent \$156 on 4 pairs of jeans. If each pair cost the same amount, how much did one pair of jeans cost?

10. \$39

Round each decimal to the nearest whole number.

11. 7.8

11. 8

12. 5.43

12. 5

13. 16.4

13. 16

Pretest**Estimate each product or quotient.**

1. $3 \times \$2.10 =$

2. $14.5 \times 3 =$

3. $\$18.20 \div 3 =$

4. $72.4 \div 9 =$

Multiply or divide.

5. $7 \times 0.4 =$

6. $2.8 \times 9 =$

7. $0.7 \times 0.6 =$

8. $1.5 \times 2.3 =$

9. $3.57 \div 0.7 =$

10. $0.83 \div 0.4 =$

Find each product or quotient.

11. $0.42 \times 10 =$

12. $1.63 \times 0.01 =$

13. $11.4 \div 100 =$

14. $5.3 \div 1,000 =$

Divide. Round to the nearest tenth if necessary.

15. $4 \overline{)37.22}$

16. $22 \overline{)5.48}$

**Sample answers
given for Ex 1–4.**

1. $3 \times \$2 = \6

2. $15 \times 3 = 45$

3. $\$18 \div 3 = \6

4. $72 \div 9 = 8$

5. 2.8

6. 25.2

7. 0.42

8. 3.45

9. 5.1

10. 2.075

11. 4.2

12. 0.0163

13. 0.114

14. 0.0053

15. 9.3

16. 0.2

Check My Progress (Lessons 1 through 5)**Estimate each product.**

1. $5 \times \$4.43 =$ **Sample answers given
for Ex 1-4.**

2. $\$16.50 \times 2 =$

3. $3.3 \times 6 =$

4. $10 \times 24.9 =$

1. **$5 \times \$4 = \20**

2. **$\$17 \times 2 = \34**

3. **$3 \times 6 = 18$**

4. **$10 \times 25 = 250$**

Multiply. Check for reasonableness.

5. $7 \times 0.6 =$

5. **4.2**

6. $53 \times 1.9 =$

6. **100.7**

7. $3.7 \times 4 =$

7. **14.8**

8. $5 \times 0.02 =$

8. **0.1**

9. $4.32 \times 5.6 =$

9. **24.192**

10. $0.12 \times 0.83 =$

10. **0.0996**

11. $2.13 \times 100 =$

11. **213**

12. $15.6 \times 0.01 =$

12. **0.156**

Check My Progress (Lessons 6 through 9)**Find each product.**

1. $0.36 \times 100 =$

1. 36

2. $5.18 \times 10^2 =$

2. 518

3. $1.09 \times 10^2 =$

3. 109

4. $6.74 \times 10^3 =$

4. 6,740

Estimate each quotient.**Sample answers given
for Ex 5–8.**

5. $\$35.72 \div 6 =$

5. \$6

6. $\$10.01 \div 9 =$

6. \$1

7. $87.4 \div 8 =$

7. 11

8. $129.5 \div 13 =$

8. 10

Look for a pattern to solve.

9. Darwin will arrive at the bus station after 4 P.M.
Buses arrive every 35 minutes beginning at 6:00 A.M.
When will Darwin's bus arrive?

9. 4:30 P.M.

10. Philip did 14 sit-ups on Monday, 21 sit-ups on Tuesday,
and 28 sit-ups on Wednesday. If the pattern continues,
how many sit-ups will he do on Friday?

10. 42 sit-ups

Vocabulary Test

Write the meaning of each bold-faced word or phrase on the line below it.

1. When estimating, it is best to use **compatible numbers**.
Sample answer: Numbers that are easy to divide mentally.
2. When dividing by a **decimal**, first change the divisor into a whole number.
Sample answer: A decimal is a number that has a digit in the tenths place, hundredths place, and beyond.
3. Line up the **decimal point** in the division problem before dividing.
Sample answer: The period at the right of the whole number portion of a decimal.
4. The students were asked to find the **dividend** in the equation $45 \div 5$.
Sample answer: The number to be divided by another number.
5. Because there is a decimal point in 8.72×10 , I used **powers of 10** to solve.
Sample answer: A multiplication pattern that moves the decimal point to the right the same number of places as the number of zeros.
6. I showed my friend how to find the **product** of 7×8.5 .
Sample answer: The answer when two numbers are multiplied.
7. To find the **quotient** of $26.4 \div 4$, you might round and divide mentally.
Sample answer: The answer when dividing one number by another number.
8. **Rounding** numbers is necessary when estimating the product of decimals.
Sample answer: Rounding is changing a decimal to the closest lower or higher number to make it easier to work with.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

Which is the best estimate of each expression?

1. $6 \times \$3.52 =$

A. \$10

C. \$24

B. \$12

D. \$30

1. **C**

2. $4.6 \times 3 =$

F. 9

H. 18

G. 15

I. 21

2. **G**

3. $\$21.05 \div 4 =$

A. \$5

C. \$7

B. \$6

D. \$8

3. **A**

What is the value of each expression?

4. $7 \times 0.8 =$

F. 5.6

H. 7

G. 6.3

I. 56

4. **F**

5. $2.9 \times 5 =$

A. 15.5

C. 14.9

B. 15

D. 14.5

5. **D**

6. $43 \times 2.8 =$

F. 86.8

H. 126.2

G. 120.4

I. 129

6. **G**

7. $5.25 \times 4.2 =$

A. 20

C. 22.05

B. 22.47

D. 20.45

7. **C**

Chapter Test, Form 1A *(continued)*

8. $11 \overline{)135.3}$

F. 10.28

H. 12.1

G. 11.3

I. 12.3

8. **I**

9. $6.8 \div 100 =$

A. 6.8

C. 0.068

B. 0.68

D. 0.0068

9. **C**

10. $21.7 \div 10 =$

F. 0.217

H. 21.7

G. 2.17

I. 217

10. **G**

11. $0.84 \div 0.3 =$

A. 2.8

C. 3.1

B. 2.9

D. 3.7

11. **A**

12. A watermelon weighs 19.8 pounds. About how much do 4 watermelons weigh?

F. 40 pounds

H. 70 pounds

G. 60 pounds

I. 80 pounds

12. **I**

13. Taika and her 4 friends bought a package of crackers for \$3.69. How much will each friend pay to the nearest cent if the cost is divided equally?

A. \$0.73

C. \$0.92

B. \$0.74

D. \$0.93

13. **B**

14. Mack earned \$50.70 mowing lawns. If he earned \$8.45 for each lawn he mowed, how many lawns did Mack mow?

F. 4 lawns

H. 6 lawns

G. 5 lawns

I. 7 lawns

14. **H**

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

Which is the best estimate of each expression?

1. $5 \times \$4.31 =$

A. \$15

C. \$23

B. \$20

D. \$25

1. **B**

2. $3.5 \times 6 =$

F. 24

H. 36

G. 30

I. 42

2. **F**

3. $\$24.21 \div 3 =$

A. \$5

C. \$7

B. \$6

D. \$8

3. **D**

What is the value of each expression?

4. $8 \times 0.9 =$

F. 0.72

H. 8

G. 7.2

I. 9

4. **G**

5. $2.7 \times 6 =$

A. 12

C. 18

B. 16.2

D. 19

5. **B**

6. $41 \times 2.4 =$

F. 0.984

H. 98.4

G. 9.84

I. 984

6. **H**

7. $6.25 \times 3.2 =$

A. 20

C. 20.45

B. 20.27

D. 21

7. **A**

Chapter Test, Form 1B *(continued)*

8. $12 \overline{)123.6}$

F. 11.3

H. 10.3

G. 11.5

I. 10.2

8. **H**

9. $5.9 \div 10 =$

A. 0.059

C. 5.9

B. 0.59

D. 59

9. **B**

10. $23.6 \div 100 =$

F. 0.236

H. 236

G. 2.36

I. 2,360

10. **F**

11. $0.73 \div 0.2 =$

A. 0.146

C. 3.65

B. 2.9

D. 36.5

11. **C**

12. A cantaloupe weighs 3.8 pounds. About how much do 5 cantaloupes weigh?

F. 10 pounds

H. 30 pounds

G. 20 pounds

I. 40 pounds

12. **G**

13. Tyanne and her 3 friends bought a package of pencils for \$2.56. How much will each friend pay to the nearest cent if the cost is divided equally?

A. \$0.85

C. \$0.75

B. \$0.82

D. \$0.64

13. **D**

14. Norman earned \$52.25 walking dogs. If he earned \$4.75 for each dog he walked, how many dogs did Norman walk?

F. 8 dogs

H. 10 dogs

G. 9 dogs

I. 11 dogs

14. **I**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression?

1. $6 \times 0.04 =$

A. 0.024

C. 2.4

B. 0.24

D. 24

1. **B**

2. $0.13 \times 0.74 =$

F. 0.0962

H. 9.62

G. 0.962

I. 96.2

2. **F**

3. $2.15 \times 100 =$

A. 0.215

C. 21.5

B. 2.15

D. 215

3. **D**

4. $14.8 \times 0.01 =$

F. 0.0148

H. 1.48

G. 0.148

I. 14.8

4. **G**

5. $43.5 \div 3 =$

A. 14.5

C. 11.5

B. 12.2

D. 145

5. **A**

6. $65.2 \div 8 =$

F. 7.11

H. 8.15

G. 7.12

I. 8.16

6. **H**

7. $109.4 \div 1,000 =$

A. 0.01094

C. 1.094

B. 0.1094

D. 10.94

7. **B**

8. $0.79 \div 0.4 =$

F. 0.19

H. 1.88

G. 0.22

I. 1.975

8. **I**

Chapter Test, Form 2A (continued)

Read each question carefully. Write your answer on the line provided.

9. $212.8 \div 3.8 =$

9. 56

10. $14.6 \div 0.8 =$

10. 18.25

11. A company made \$675 in ticket sales. They sold 100 tickets. How much did the company make per ticket, if each ticket cost the same amount?

11. \$6.75

12. Annabelle's house is 0.4 mile from the school. The distance from her house to the grocery store is 10 times the distance from the school. What is the distance from Annabelle's house to the grocery store?

12. 4 miles

13. Shannon exercises for 0.75 hour on Monday, Wednesday, and Friday each week. How many hours will she exercise in 4 weeks?

13. 9 hours

14. There are 19.6 grams of protein in 4 ounces of cashews. About how many grams of protein are in one ounce of cashews?

14. 5 grams

15. Neal spent \$94.80 on 6 tickets to the water park. What was the cost of one ticket?

15. \$15.80

16. Kay bought 7.63 pounds of dried fruit. How much will she put in each bag if she needs to equally divide the amount into 10 bags?

16. 0.763 lb

17. A recipe calls for 1.75 cups of sugar to make a cake. How many cups of sugar are needed for 4 cakes?

17. 7 cups

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression?

1. $5 \times 0.03 =$

A. 0.0015

B. 0.015

C. 0.15

D. 1.5

1. **C**

2. $0.14 \times 0.63 =$

F. 88.2

G. 8.82

H. 0.882

I. 0.0882

2. **I**

3. $3.24 \times 10 =$

A. 324

B. 32.4

C. 3.24

D. 0.324

3. **B**

4. $12.7 \times 0.1 =$

F. 0.0127

G. 0.127

H. 1.27

I. 12.7

4. **H**

5. $44.3 \div 2 =$

A. 11.15

B. 12.1

C. 20.1

D. 22.15

5. **D**

6. $56.4 \div 6 =$

F. 9.2

G. 9.4

H. 9.6

I. 9.8

6. **G**

7. $108.6 \div 100 =$

A. 1.086

B. 10.86

C. 108.6

D. 1,086

7. **A**

8. $0.69 \div 0.3 =$

F. 2.3

G. 2.23

H. 1.23

I. 0.23

8. **F**

Chapter Test, Form 2B (continued)

Read each question carefully. Write your answer on the line provided.

9. $308.7 \div 4.9 =$

A. 63

C. 70

B. 64

D. 73.1

9. 63

10. $16.4 \div 0.4 =$

F. 4.1

H. 40.1

G. 31.1

I. 41

10. 41

11. A company made \$785 in ticket sales. They sold 100 tickets. How much did the company make per ticket, if each ticket cost the same amount?

A. \$785

C. \$7.85

B. \$78.5

D. \$0.785

11. \$7.85

12. Enrique's house is 0.25 mile from the park. The distance from his house to the library is 10 times that. What is the distance from Enrique's house to the library?

12. 2.5 miles

13. Summer exercises for 0.5 hour on Monday, Wednesday, and Friday each week. How many hours will she exercise in 4 weeks?

13. 6 hours

14. There are 11.7 grams of protein in 3 ounces of popcorn. About how many grams of protein are in each ounce of popcorn?

14. 4 grams

15. Nelton spent \$44.75 on 5 tickets to the football game. What was the cost of one ticket?

15. \$8.95

16. Lata bought 4.78 pounds of granola. How much will she put in each bag if she needs to equally divide the amount into 10 bags?

16. 0.478 lb

17. A recipe calls for 1.25 cups of brown sugar to make a batch of cookies. How many cups of brown sugar are needed for 5 batches of cookies?

17. 6.25 c

Chapter Test, Form 3A**Read each question carefully. Write your answer on the line provided.****Estimate.**

1. $\$19.75 \times 6 =$

2. $9 \times 21.3 =$

3. The Butcher family drinks 473.2 ounces of water each week. About how many ounces of water will they drink in 4 weeks?

Sample answer:

1. **\$120**

2. **Sample answer:**
 180

3. **Sample answer:**
 2,000 oz

Multiply.

4. $1.9 \times 8 =$

4. **15.2**

5. $0.76 \times 5 =$

5. **3.8**

6. $5 \text{ ft} \times 3.72 \text{ ft} =$

6. **18.6 ft²**

7. $0.22 \times 0.81 =$

7. **0.1782**

8. $5.23 \times 0.6 =$

8. **3.138**

9. Pele is buying a pack of gum that costs \$0.65. The sales tax is found by multiplying the cost of the gum by 0.07. What is the sales tax on the gum?

9. **\$0.05**

10. $21.4 \times 0.001 =$

10. **0.0214**

11. $1.65 \times 100 =$

11. **165**

12. Mark is making payments on a new mountain bike. He needs to make 10 equal payments of \$20.69 each. What is the total cost of the bike?

12. **\$206.90**

Estimate.

13. $71.9 \div 8 =$

13. **Sample answer: 9**

14. $0.79 \div 0.4 =$

14. **sample answer: 2**

15. Cam buys 3 CDs for \$26.77. If each CD costs the same amount, about how much does each CD cost?

15. **Sample answer: \$9**

Chapter Test, Form 3A (continued)**Divide. Round to the nearest tenth if necessary.**

16. $65.2 \div 26 =$

16. 2.5

17. $241.5 \div 14 =$

17. 17.3

18. $323.6 \div 47 =$

18. 6.9

19. Sydney bought 5 books for \$79.75. If each book cost the same amount, find the price of each book.

19. \$15.95

Find each quotient.

20. $27.3 \div 1,000 =$

20. 0.0273

21. $8.4 \div 10 =$

21. 0.84

22. $0.65 \div 100 =$

22. 0.0065

23. Tucker is buying dog food at the pet store. Puppy Power is \$24.49 for 10 pounds. Nibbles is \$1.99 per pound. Which brand is the better buy?

23. Nibbles

Divide.

24. $6.96 \div 3.2 =$

24. 2.175

25. $1.204 \div 0.35 =$

25. 3.44

26. $0.5 \div 0.04 =$

26. 12.5

27. $15.75 \div 0.21 =$

27. 75

28. Vance drove 137.2 miles to his mother's house. His car used 4.9 gallons of gas. How many miles per gallon did Vance's car get?

28. 28 miles per gallon

29. On Saturday, Tina rode her bike 2.9 miles on the bike trail. If the entire bike ride took her 43.5 minutes, how long did it take her to ride each mile?

29. 15 min

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Estimate.

- $\$16.25 \times 5 =$
- $8 \times 22.3 =$
- The Thomas family drinks 524.2 ounces of water each week. About how many ounces of water will they drink in 5 weeks?

Multiply.

- $2.8 \times 7 =$
- $0.53 \times 6 =$
- $6 \text{ ft} \times 4.73 \text{ ft} =$
- $0.13 \times 0.72 =$
- $5.23 \times 0.6 =$
- Ramy is buying a snack that costs $\$0.95$. The sales tax is found by multiplying the cost of the snack by 0.06 . What is the sales tax on the snack?
- $23.6 \times 0.001 =$
- $1.83 \times 100 =$
- Mark is making payments on a new game system. He needs to make 10 equal payments of $\$32.59$ each. What is the total cost of the game system?

Estimate.

- $62.8 \div 9 =$
- $0.58 \div 0.2 =$
- Selma buys 4 DVDs for $\$59.96$. If each DVD costs the same amount, about how much does each DVD cost?

Sample answers given
for Ex 1–3, 13–15.

1. **\$100**

2. **160**

3. **2,500 oz**

4. **19.6**

5. **3.18**

6. **28.38 ft²**

7. **0.0936**

8. **3.138**

9. **\$0.06**

10. **0.0236**

11. **183**

12. **\$325.90**

13. **7**

14. **3**

15. **\$15**

Chapter Test, Form 3B (continued)**Divide. Round to the nearest tenth if necessary.**

16. $57.3 \div 24 =$ 16. 2.4

17. $138.5 \div 16 =$ 17. 8.7

18. $234.4 \div 35 =$ 18. 6.7

19. Tamika bought 4 magazines for \$39.40. If each magazine cost the same amount, find the price of each magazine. 19. \$9.85

Find each quotient.

20. $36.4 \div 1,000 =$ 20. 0.0364

21. $7.8 \div 100 =$ 21. 0.078

22. $0.95 \div 10 =$ 22. 0.095

23. Sean is buying cat food at the pet store. Fluffy Kitty is \$14.59 for 10 pounds. Puff Chow is \$1.86 per pound. Which brand is the better buy? 23. Fluffy Kitty

Divide.

24. $7.84 \div 3.2 =$ 24. 2.45

25. $2.403 \div 0.45 =$ 25. 5.34

26. $0.6 \div 0.03 =$ 26. 20

27. $14.95 \div 0.23 =$ 27. 65

28. Wally drove 286.4 miles to his dad's house. His car used 8.95 gallons of gas. How many miles per gallon did Wally's car get? 28. 32 miles per gallon

29. On Saturday, Noel rode his bike 8.9 miles on the bike trail. If the entire bike ride took him 115.7 minutes, how long did it take him to ride each mile? 29. 13 min

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. Alex wants to buy some computer games at the store. Each game costs \$26.85. How much money does Alex need to purchase 4 computer games?



- (A) \$100 (C) \$104
 (B) \$100.40 (D) \$107.40

2. Leigh biked 7.5 miles each day for 3 days. How many miles did she bike altogether?



- (F) 24 miles (H) 22.5 miles
 (G) 23.5 miles (I) 22 miles

3. The students at McKinley School collected \$2,389.64 during a fundraiser. The money will be divided equally between two charities. Rounded to the nearest hundred dollars, about how much money will the students donate to each charity?

- (A) \$1,000
 (B) \$1,194.82
 (C) \$1,200
 (D) \$5,000

4. One pineapple weighs 1.8 pounds. About how much would four pineapples weigh?



- (F) 4 pounds (H) 4.8 pounds
 (G) 8 pounds (I) 2.2 pounds

5. Richard lives 14.3 miles from the museum. He lives 10 times that distance from the nearest zoo. How many miles away does Richard live from the nearest zoo?



- (A) 1,430 miles (C) 14.3 miles
 (B) 143 miles (D) 14,300 miles

6. Chandler ran for 23 minutes on Monday, 28 minutes on Wednesday, and 33 minutes on Friday. If this pattern continues, for how many minutes will he run on Sunday?

- (F) 43 minutes
 (G) 38 minutes
 (H) 30 minutes
 (I) 48 minutes



GO ON ►

Standardized Test Practice *(continued)*

7. The circus made \$14,250 in ticket sales one weekend. They sold 1,000 tickets. How much did the circus make per ticket, if each ticket cost the same amount?



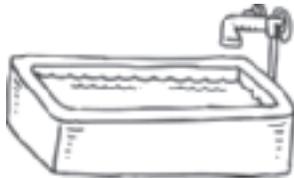
- (A) \$142.50
- (B) \$14.00
- (C) \$1.43
- (D) \$14.25

10. A pair of shoes costs \$70. To find the sales tax, multiply the cost by 0.06. How much sales tax would you pay when purchasing the shoes?



- (F) \$4.72
- (G) \$74.20
- (H) \$0.42
- (J) \$4.20

8. An average person uses 11.6 gallons of water during a bath. How many gallons of water would an average person use for 7 baths?



- (F) 11.2 gallons
- (G) 77.1 gallons
- (H) 81.2 gallons
- (I) 82 gallons

11. Find the area of a lawn that is 62 feet long by 57.3 feet wide.
 $A = \text{length} \times \text{width}$

- (A) 3,552.6 square feet
- (B) 3,534 square feet
- (C) 2,976 square feet
- (D) 2,900 square feet

9. Louise has \$62. She wants to buy some movies at the store. If each movie costs \$15.50, how many movies can Louise buy?



- (A) 5 movies
- (B) 4 movies
- (C) 3 movies
- (D) 2 movies

12. There are 9.6 grams of protein in a serving of trail mix. How many grams of protein are in 3 servings of the trail mix?

- (F) 30 grams
- (G) 28.8 grams
- (H) 27.6 grams
- (I) 27 grams



Chapter Assessment Answer Key

Extended-Response Test, Page 156 *Sample Answers*

In addition to the scoring rubric found on page 157, the following sample answers may be used as guidance in evaluating open-ended assessment items.

- 1. a.** Sample answer: $\$25 \times 5 = \125
 - b.** No; $\$24.99 \times 5 = \124.25 . She only has \$115. She needs \$9.95 more.
 - c.** Sample answer: higher, because I rounded 24.99 up to 25.
- 2. a.** Use decimal models to show 7.8 as 7 wholes and 8 tenths. Trade one whole for ten tenths. Separate the blocks into three equal groups.
 - b.** There are two wholes and six tenths in each group.
 - c.** You can use estimation to help you check the reasonableness of your answer by multiplying the numbers as whole numbers, and then use your estimate to help place the decimal point in the actual answer.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

Four students completed a relay race in 3.6 minutes.

1. Assuming each student ran the same speed, use mental math to estimate about how many minutes each student ran.

Sample answer: about 1 minute

2. Tell how you got your answer.

Sample answer: $4 \div 4 = 1$

3. Is your estimate less or greater than the exact answer?

Sample answer: greater than

4. Is it possible to have more than one estimate for this problem? Explain.

Sample answer: Yes; you could round 3.6 down to 3.2, and you would get an estimate of 0.8 instead of 1.

Use base-ten blocks to find $3.6 \div 4$.

5. How many tenths are in each group?

9 tenths

6. Write a division problem based on what we have talked about above.

$3.6 \div 4 = 0.9$

Oral Assessment *(continued)*

7. How can you check the reasonableness of your quotient?

Sample answer: Multiply your quotient by the divisor, or compare your answer with the estimate.

8. How do you know that your quotient is reasonable?

Sample answer: It is close to the estimate.

Mackenzie solved 55.14×2.1 and got 11.5794 as her answer.

9. Is her answer correct?

no

10. Explain your answer.

Sample answer: The decimal should be 3 places from the right, not 4 places.

11. Find 55.14×2.1 .

115.794

12. Is your answer reasonable?

Sample answer: Yes; the estimated answer is $55 \times 2 = 110$, and 115.794 is close to 110.

Am I Ready?

Practice

Find the missing number.

1. $8 + \underline{4} = 12$ 2. $\underline{16} - 7 = 9$ 3. $36 - \underline{19} = 17$

4. $\underline{26} + 6 = 32$ 5. $24 - \underline{15} = 9$ 6. $\underline{25} - 17 = 8$

7. Colton has \$125 to spend on sports equipment. He bought a skateboard for \$75 and a helmet for \$30. How much does Colton have left to spend? _____

\$20

8. Sydney scored 45 points in her last three basketball games. She scored 12 the first game and 18 the second game. How many points did she score in the third game? _____

15 points

Identify each pattern.

9. 19, 17, 15, 13.... 10. 6, 10, 14, 18.... 11. 13, 26, 39, 52....

subtract 2

add 4

add 13

12. Wyatt deposits his allowance in the bank each week. What is the rule for the pattern shown in his bank account?

The rule is to add \$15 each week.

Bank Account				
Week	1	2	3	4
Amount (\$)	15	30	45	60

Am I Ready?

Review

Find the missing number.

$24 + \square = 35$

$35 - 24 = 11. \text{ So, } 24 + 11 = 35$

1. $16 + \boxed{13} = 29$

2. $\boxed{14} + 11 = 25$

3. $41 - \boxed{14} = 27$

4. $16 + \boxed{12} = 28$

5. $\boxed{9} + 18 = 27$

6. $\boxed{30} + 24 = 54$

7. $\boxed{8} + 17 = 25$

8. $\boxed{7} + 11 = 18$

9. Mia and her mother baked 2 batches of cookies. Each batch had 12 cookies. Mia's brother ate some cookies. They have 18 cookies left. How many cookies did Mia's brother eat?

6 cookies

10. The McKenna family picked 27 baskets of strawberries on Saturday. Mr. McKenna used some of the baskets to make jam. There are 13 baskets left? How many baskets did Mr. McKenna use to make jam?

14 baskets

Am I Ready?

Apply

Solve.

1. Liam rode his bike 16 miles this week. He rode 7 miles on Friday and the rest on Saturday. How many miles did he ride his bike on Saturday?

9 miles

2. Ella bought 26 tickets for rides at the carnival. She used 13 tickets and gave the rest of the tickets to her sister. How many tickets did she give to her sister?

13 tickets

3. Landon spends \$7 at the fair. He buys a bag of popcorn for \$3 and a bottle of sports drink. How much money does he spend on the bottle of sports drink?

\$4

4. Aiden bought 11 pencils and 24 pieces of chalk at the art store. How many items did he buy in all?

35 items

5. Madelyn and her dad picked apples over the weekend. Madelyn picked 14 apples and her dad picked 22 apples. On the way home they both ate 2 apples. How many apples did they have left?

32 apples

6. Avery is counting the birds in her back yard. She counts 9 blue jays, 5 robins and 4 yellow finches. How many total birds did she count?

18 birds

Diagnostic Test

Find the missing number. Write your answers on the lines provided.

1. $9 + \square = 15$ 2. $\square - 8 = 14$ 3. $16 - \square = 12$ 1. **6**

2. **22**

4. $\square - 5 = 11$ 5. $35 + \square = 42$ 6. $21 - \square = 8$ 3. **4**

4. **16**

5. **7**

7. Trinity has \$175 to spend on clothes for school. She bought a jacket for \$79 and two sweaters for \$40 each. How much does Trinity have left to spend? 6. **13**

7. **\$16**

8. Alexander's football team scored 34 points in their last game. They scored 14 points during the first quarter, 3 points in the second quarter and 7 points in the third quarter. How many points did they score in the fourth quarter? 8. **10 points**

Identify each pattern.

9. 17, 14, 11, 8.... 10. 6, 13, 20, 27.... 11. 11, 31, 51, 71.... 9. **subtract 3**

10. **add 7**

12. Reanne earns an allowance each week. What is the rule for the pattern shown in the table? 11. **add 20**

12. **The rule is to add \$25 each week.**

Allowance Earned				
Week	1	2	3	4
Amount (\$)	25	50	75	100

Pretest

Evaluate each expression.

1. $7 - 2 =$ 2. $5^2 \div 5 =$

3. What do you notice about the number of chairs each time a row is added to the table below?

rows	1	2	3	4	5
chairs	5	10	15	20	25

1. 5

2. 5

3. the number of chairs increases by 5 each time a row is added.

Find the value of each expression.

4. $(16 - 6) \times 4 =$ 5. $(12 \div 2) - (2 \times 2) =$

4. 40

5. 2

Solve each equation. Check your solution.

6. $56 = 8 \times \underline{\hspace{1cm}}$ 7. $13 = \underline{\hspace{1cm}} - 2$

6. 7

7. 15

8. $\underline{\hspace{1cm}} + 19 = 27$ 9. $\underline{\hspace{1cm}} \div 3 = 6$

8. 8

9. 18

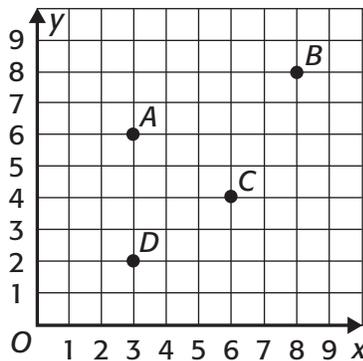
Locate and name each point.

10. A

11. B

12. C

13. D



14. Put the following operations in the order you would use them when evaluating expressions: add, parentheses, exponent, divide.

10. (3, 6)

11. (8, 8)

12. (6, 4)

13. (3, 2)

14. parentheses
exponent
divide
add

Check My Progress (Lessons 1 through 4)**Find the value of each expression.**

1. $18 - (3 \times 4) =$

1. 6

2. $(10^2 - 2) \div 2 =$

2. 49

3. $(10 - 8) \times 7 =$

3. 14

4. $(18 \div 2) \times 8 =$

4. 72

Write each phrase as a numerical expression.

5. divide 15 by 3, then add 4.

5. $15 \div 3 + 4$

6. multiply 12 by 2, then subtract 13

6. $12 \times 2 - 13$

7. subtract 6 from 24, then divide by 3

7. $(24 - 6) \div 3$

8. multiply 8 by 7, then subtract 26

8. $8 \times 7 - 26$

Solve each problem by working backward.

9. Lena is 4 years older than her brother Sebastian. Sebastian is 3 years older than their sister Carmen. Carmen is 9 years younger than their brother Eduardo. If Eduardo is 22 years old, how old is Lena?

9. 20 years old

10. Members of the basketball team sold raffle tickets to raise money for new equipment. The first 30 tickets sold for \$5 each. To sell more tickets, the players lowered the price of each ticket to \$3. If the team raised a total of \$285, how many \$3 tickets were sold?

10. 45 tickets

Vocabulary Test

Use context clues to write a description for each bold faced vocabulary word.

1. The math test asked students to find the next **term** in the pattern 5, 10, 15, ...
Sample answer: A term is a number in a list, pattern, or sequence.

2. The students were asked to **evaluate** the following: $x + 3$ if $x = 4$.
Sample answer: When you evaluate an expression, you find its value.

3. The following **expression** shows a variable and a number: $n + 12$.
Sample answer: An expression is a combination of variables and/or numbers and at least one operation.

4. Is the **sequence** 2, 4, 6, 8, ... an increasing or decreasing pattern?
Sample answer: A sequence is a list of numbers that follow a specific pattern.

5. The students were asked why the **ordered pair** is important when plotting points on a graph.
Sample answer: An ordered pair shows the position of the point on a coordinate plane.

6. The students were given the following expression to evaluate and asked to identify the **order of operations**: $10 - (2 \times 6)$.
Sample answer: The order of operations is a set of rules that tells which operation to do first when evaluating an expression.

7. The students were asked to plot the ordered pairs on the **coordinate plane**.
Sample answer: A coordinate plane is formed by the x -axis and y -axis.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

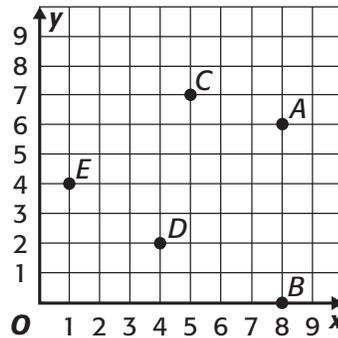
1. What is the value of the expression $4 \times (9 - 2)$?

- A. 16 C. 20
B. 18 D. 28

1. _____ **D**

Use the coordinate plane for Exercises 2–4.

What is the name of each point?



2. $(5, 7)$

- F. A H. C
G. B I. D

2. _____ **H**

3. $(8, 0)$

- A. A C. C
B. B D. D

3. _____ **B**

4. Name the coordinate for point A.

- F. $(1, 4)$ H. $(8, 0)$
G. $(4, 2)$ I. $(8, 6)$

4. _____ **I**

5. School uniforms cost \$15 plus a one-time \$5 fee if you get your initials embroidered on the collar. How much did Garrison pay if he ordered 4 embroidered uniforms?

- A. \$80 C. \$60
B. \$65 D. \$55

5. _____ **B**

Evaluate each expression.

6. $45 + 36 \div 9$

- F. 9 H. 1
G. 49 I. 41

6. _____ **G**

7. $(12 - 4) \times [(6 + 15) \div 3]$

- A. 56 C. 17
B. 88 D. 21

7. _____ **A**

Chapter Test, Form 1A *(continued)*

8. $16 \times 4 \div 4^2$

- F. 16 H. 4
G. 8 I. 32

8. _____ **H** _____

9. What are the next three terms in the following sequence?

7, 13, 19, 25,...

- A. 30, 37, 43 C. 31, 37, 43
B. 27, 33, 49 D. 29, 33, 37

9. _____ **C** _____

10. What is the value of the expression $10 + (6 \div 3)$?

- F. 8 H. 11
G. 10 I. 12

10. _____ **I** _____

11. Stephen earns \$6 an hour mowing grass. He earned a total of \$30 last week. How many hours did he mow grass?

- A. 180 hours C. 5 hours
B. 24 hours D. 36 hours

11. _____ **C** _____

Write each phrase as a numerical expression.

12. add 7 and 3, then multiply by 5

- F. $7 + 3 \times 5$ H. $5 \times 7 + 3$
G. $(7 + 3) \times 5$ I. $7 + (3 \times 5)$

12. _____ **G** _____

13. divide 28 by 7, then subtract 2

- A. $28 \div 7 + 2$ C. $2 - 28 \div 7$
B. $28 \div (7 - 2)$ D. $28 \div 7 - 2$

13. _____ **D** _____

14. multiply 9 by 5, then add 7

- F. $9 \times 7 - 5$ H. $9 \times 7 + 5$
G. $9 \times 5 + 7$ I. $9 \times 5 - 7$

14. _____ **G** _____

Chapter Test, Form 1B

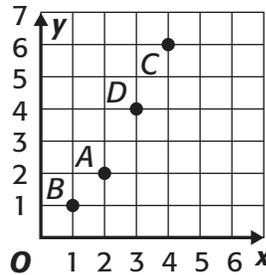
Read each question carefully. Write the letter for your answer on the line provided.

1. What is the value of the expression $3 \times (6 - 4)$?
- A. 3 C. 30
 B. 6 D. 72

1. **B**

Use the coordinate plane for Exercises 2–4.
 What is the name of each point?

2. (4, 6)
 F. A H. C
 G. B I. D



3. (2, 2)
 A. A C. C
 B. B D. D

2. **H**

3. **A**

4. Name the coordinate for point D.
 F. (1, 1) H. (3, 4)
 G. (4, 6) I. (2, 2)

4. **H**

5. School uniforms cost \$25 plus a one-time \$5 fee if you get your initials embroidered on the collar. How much did Bryce pay if he ordered 4 embroidered uniforms?
- A. \$100 C. \$125
 B. \$105 D. \$129

5. **B**

Evaluate each expression.

6. $12 - 3 \times 4 + 7$
 F. 8 H. 7
 G. 252 I. 43

6. **H**

7. $30 \div 6 + 5^2$
 A. 31 C. 15
 B. 2 D. 30

7. **D**

Chapter Test, Form 1B (continued)

8. $[5 \times (4 + 8)] - 13$

F. 47

H. 59

G. 15

I. 4

8. **F**

9. What are the next terms in the following sequence?

84, 80, 76, 72, ...

A. 76, 66, 62

C. 70, 68, 66

B. 68, 64, 60

D. 64, 50, 46

9. **B**10. What is the value of the expression $12 + (8^2 \div 4)$?

F. 14

H. 34

G. 28

I. 80

10. **G**

11. Travis earns \$5 an hour mowing grass. He earned a total of \$30 last week. How many hours did he mow grass?

A. 150 hours

C. 25 hours

B. 5 hours

D. 6 hours

11. **D**

Write each phrase as a numerical expression.

12. multiply 9 by 6, then add 4

F. $9 \times 6 + 4$ H. $9 \times (6 + 4)$ G. $9 \times 6 - 4$ I. $6 - 4 \times 9$ 12. **F**

13. add 12 to 8, then divide by 4

A. $4 \div (12 + 8)$ C. $12 + 8 \div 4$ B. $(12 + 8) \div 4$ D. $12 \div 4 + 8$ 13. **B**

14. divide 40 by 8, then subtract 2

F. $40 \times 8 + 2$ H. $40 \times 8 - 2$ G. $40 \div 8 + 2$ I. $40 \div 8 - 2$ 14. **I**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

Identify the next three terms in each sequence.

1. 9, 27, 81, ...
 - A. 162, 324, 872 C. 162, 486, 1,458
 - B. 243, 729, 2,187 D. 243, 486, 972
2. 81, 90, 99, 108, ...
 - F. 118, 128, 138 H. 118, 127, 136
 - G. 117, 128, 139 I. 117, 126, 135
3. 95, 88, 81, 74, ...
 - A. 69, 64, 59 C. 64, 54, 44
 - B. 67, 59, 51 D. 67, 60, 53

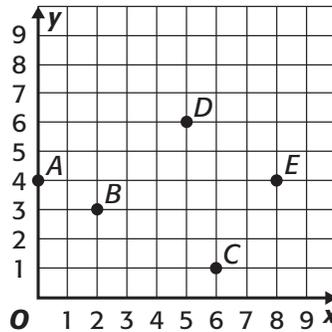
1. _____ **B** _____

2. _____ **I** _____

3. _____ **D** _____

Use the coordinate plane for Exercises 4–6.
What is the name of each point?

4. (2, 3)
 - F. A H. C
 - G. B I. D
5. (6, 1)
 - A. D C. C
 - B. B D. E



4. _____ **G** _____

5. _____ **C** _____

6. Name the coordinate for point A.
 - F. (0, 4) H. (6, 1)
 - G. (2, 3) I. (5, 6)

6. _____ **F** _____

What is the value of each expression?

7. $15 + (12 \div 3)$
 - A. 8 C. 19
 - B. 10 D. 21
8. $45 - (6 \times 6)$
 - F. 9 H. 46
 - G. 87 I. 234

7. _____ **C** _____

8. _____ **F** _____

Chapter Test, Form 2A (continued)

Read each question carefully. Write your answer on the line provided.

Evaluate each expression.

9. $3 \times 8 \div 4 =$

9. **6**

10. $4 \times 4 - 8 =$

10. **8**

11. What are the next three terms in the following sequence? 3, 6, 12, 24,...

11. **48, 96, 192**

12. Paulette started with \$105 in her savings account. She deposited \$45, withdrew \$50, and then deposited \$20. How much money is in Paulette's savings account now?

12. **\$120**

13. The tallest building in the United States is the Willis Tower located in Chicago, Illinois. The Willis Tower is 1,451 feet tall. The tallest building in the world is Taipei 101 located in Taipei, Taiwan. Taipei 101 is 1,671 feet tall. How many feet taller is Taipei 101 than the Willis Tower?

13. **220 ft**

Write each phrase as a numerical expression.

14. add 8 and 32, then divide by 5

14. **$(8 + 32) \div 5$**

15. multiply 6 and 7, then subtract 4

15. **$6 \times 7 - 4$**

16. divide 36 by 3, then add 9

16. **$36 \div 3 + 9$**

17. subtract 4 from 39, then divide by 5

17. **$(39 - 4) \div 5$**

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

Identify the next three terms in each sequence.

1. 19, 27, 35, 43, ...

- A. 53, 63, 73 C. 51, 59, 67
 B. 51, 60, 68 D. 52, 61, 70

1. **C**

2. 122, 118, 114, 110, ...

- F. 106, 102, 98 H. 105, 100, 95
 G. 104, 98, 92 I. 108, 106, 104

2. **F**

3. 5, 10, 20, 40, ...

- A. 80, 160, 320 C. 60, 80, 100
 B. 80, 120, 160 D. 100, 200, 300

3. **A**

Use the coordinate plane for Exercises 4–6.

What is the name of each point?

4. (0, 3)

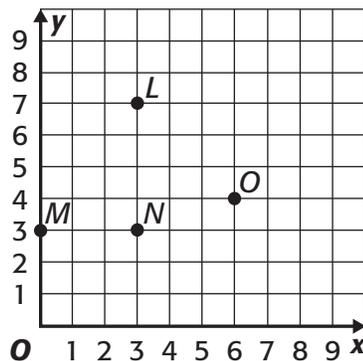
- F. L H. N
 G. M I. O

5. (6, 4)

- A. L C. O
 B. M D. N

6. Name the coordinate for point L.

- F. (3, 7) H. (3, 3)
 G. (0, 3) I. (6, 4)



4. **G**

5. **C**

6. **F**

What is the value of each expression?

7. $12 + (14 \div 2) =$

- A. 8 C. 21
 B. 19 D. 28

7. **B**

8. $32 - (5 \times 6) =$

- F. 2 H. 43
 G. 93 I. 162

8. **F**

Chapter Test, Form 2B (continued)

Read each question carefully. Write your answer on the line provided.

Evaluate each expression.

9. $3 \times 7 \div 3 =$

9. 7

10. $4 \times 3 - 7 =$

10. 5

11. What are the next three terms in the following sequence? 256, 128, 64, 32,...

11. 16, 8, 4

12. Amy started with \$125 in her savings account. She deposited \$25, withdrew \$15, and then deposited \$30. How much money is in Amy's savings account now?

12. \$165

13. The tallest man in the world is about 101 inches tall. The shortest man in the world is about 29 inches tall. How much taller is the tallest man than the shortest man?

13. 72 in.

Write each phrase as a numerical expression.

14. subtract 9 from 25, then add 8

14. $25 - 9 + 8$

15. multiply 7 by 8, then divide by 4

15. $7 \times 8 \div 4$

16. divide 49 by 7, then add 12

16. $49 \div 7 + 12$

17. add 19 and 2, then divide by 7

17. $(19 + 2) \div 7$

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Write an equation for the following, then solve.

1. Bread costs \$6 per loaf at the bakery. How many loaves can you buy with \$36?

$$1. \quad \underline{\$6b = \$36;}$$

$$\quad \underline{b = 6 \text{ loaves}}$$

2. Cynthia bought 7 posters, which cost \$35. Shipping for each poster cost x dollars. She paid \$49 dollars altogether. How much was shipping for each poster?

$$2. \quad \underline{\$35 + 7x = \$49;}$$

$$\quad \underline{x = \$2}$$

Find the value of each expression.

3. $10 + (6^3 \div 2) =$

3. $\underline{118}$

4. $42 - (3^2 \times 3) =$

4. $\underline{15}$

Evaluate each expression.

5. $3 \times 7 - 6 =$

5. $\underline{15}$

6. $3^2 + 15 =$

6. $\underline{24}$

Write each phrase as a numerical expression.

7. divide 81 by 9, then multiply by 3

7. $\underline{81 \div 9 \times 3}$

8. subtract 9 from 30, then divide by 7

8. $\underline{(30 - 9) \div 7}$

9. multiply 4 by 8, then subtract 6

9. $\underline{4 \times 8 - 6}$

10. add 4 to 11, then divide by 5

10. $\underline{(4 + 11) \div 5}$

11. subtract 7 from 12, then multiply by 9

11. $\underline{(12 - 7) \times 9}$

Write the next three terms in the sequence.

12. 13, 20, 27, 34,...

12. $\underline{41, 48, 55}$

Chapter Test, Form 3A *(continued)*

Solve.

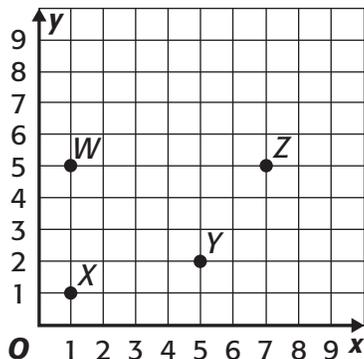
13. To make muffins, you need about 4 cups of flour per dozen. How many cups of flour will you need to make 5 dozen muffins?

13. 20 cups

14. Stewart, Angela, and Thomas each prefer a different type of book. They read history, poetry, and science fiction. Angela does not like poetry. Thomas does not like poetry or science fiction. Which type of book does each person like best?

14. Stewart likes poetry; Angela likes science fiction; Thomas likes history

Use the coordinate plane for Exercises 15 and 16.



15. Name the coordinates for point *W*.

15. (1, 5)

16. Which point has the coordinates (1, 1)?

16. X

Evaluate each expression.

17. $(4 + 3^2) - 10 =$

17. 3

18. $7 \times 8 + (2^3 \div 4) =$

18. 58

19. $50 - 10 \times 3 + 8 =$

19. 28

20. Marisela added 7 seashells to her collection. She now has 68 seashells. Write and solve an equation to find the number of seashells she originally had.

20. $x + 7 = 68$;
Marisela had
61 seashells.

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Write an equation for the following, then solve.

1. Shirts are on sale for \$12 at a clothing store. How many shirts can you buy with \$48?

1. $\underline{\$12 \times b = \$48;}$
 $\underline{b = 4 \text{ shirts}}$

2. Pravat bought 4 movies, which cost \$36. Shipping for each movie cost y dollars. He paid \$44 dollars altogether. How much was shipping for each movie?

2. $\underline{\$36 + 4 \times y =}$
 $\underline{\$44; y = \$2}$

Find the value of each expression.

3. $11 + (3^3 \div 3) =$

3. $\underline{20}$

4. $14 - (3 \times 2^2) =$

4. $\underline{2}$

Evaluate each expression.

5. $6 \times 7 - 5 =$

5. $\underline{37}$

6. $3^3 + 1 =$

6. $\underline{28}$

Write each phrase as a numerical expression.

7. divide 35 by 7, then multiply by 4

7. $\underline{35 \div 7 \times 4}$

8. add 13 to 17, then divide by 3

8. $\underline{(13 + 17) \div 3}$

9. subtract 8 from 32, then divide by 6

9. $\underline{(32 - 8) \div 6}$

10. multiply 4 by 9, then add 2

10. $\underline{4 \times 9 + 2}$

11. divide 88 by 11, then subtract 7

11. $\underline{88 \div 11 - 7}$

Write the next three terms in the sequence.

12. 126, 117, 108, 99,...

12. $\underline{90, 81, 72}$

Chapter Test, Form 3B *(continued)*

Solve.

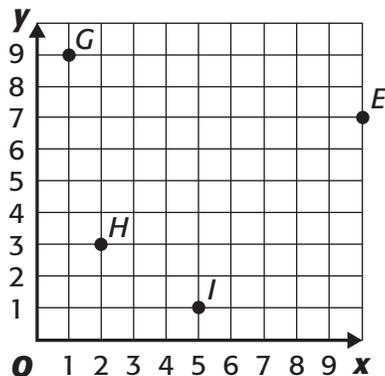
13. To make bread, you need about 6 cups of flour per loaf. How many cups of flour will you need to make 17 loaves?

13. 102 cups

14. Tracy, Kyler, and Yale each prefer a different type of book. They read history, poetry, and science fiction. Yale does not like poetry. Kyler does not like poetry or science fiction. Which type of book does each person like best?

14. Kyler likes history; Tracy likes poetry; Yale likes science fiction

Use the coordinate plane for Exercises 15 and 16.



15. Name the coordinates for point *E*.

15. (10, 7)

16. Which point has the coordinates (5, 1)?

16. I

Evaluate each expression.

17. $4 + 7^2 - 8 =$

17. 45

18. $(15 - 3) \times 2^3 =$

18. 96

19. $(4 + 5^2) - (2 \times 12) =$

19. 5

20. Karley added 14 bottle caps to her collection. She now has 54 bottle caps. Write and solve an equation to find the number of bottle caps she originally had.

20. $x + 14 = 54;$
Karley had 40 bottle caps.

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. A group of 902 students is going on a field trip to the museum. If each bus holds 82 students, how many buses will the students need?



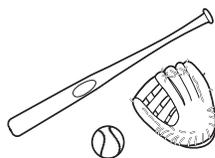
- (A) 9 buses (C) 12 buses
 (B) 11 buses (D) 13 buses

2. Sally has some money in her pocket for lunch. She wants to know how much money she will have after buying lunch. What is the missing value in the table?

money before	4	6	8	10	12
money after	0	■	4	6	8

- (F) 1 (H) 3
 (G) 2 (I) 4

3. Travis and his three friends go to the baseball game. Each person buys a ticket for \$8, a snack for \$4, and a drink for \$2. Which numerical expression represents the total cost of the trip to the baseball game for Travis and his friends?



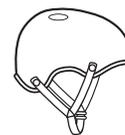
- (A) $4 + (\$8 \times \$4 \times \$2)$
 (B) $4 \times (\$8 + \$4 + \$2)$
 (C) $(4 \times \$8) + (\$4 \times \$2)$
 (D) $(4 \times \$8 + \$4) + (4 \times \$4 + \$2)$

4. Ernesto works at the food bank. He received a donation of 450 cans of food. The food bank now has 934 cans of food. Use the equation $x + 450 = 934$ to find out how many cans of food Ernesto had originally.



- (F) 1,384 cans
 (G) 934 cans
 (H) 484 cans
 (I) 450 cans

5. Cameron bought an electric scooter for \$38.99 and two helmets for \$29.49 each. Write an expression to show how much Cameron spent in all.



- (A) $2 \times (\$38.99 + \$29.49)$
 (B) $(2 \times \$38.99) + \29.49
 (C) $\$38.99 + \29.49
 (D) $\$38.99 + (2 \times \$29.49)$

6. Evaluate the expression.

$$(3 \times 2^2) \times (8 + 1)$$

- (F) 324
 (G) 96
 (H) 98
 (I) 108

Standardized Test Practice *(continued)*

7. Danny is planting tomatoes in his garden. He will plant seven plants in eight rows. What is the number of plants that Danny will plant?



- 56 plants
- 50 plants
- 49 plants
- 42 plants

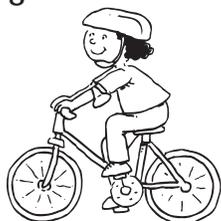
8. Betty is making a cake. She had 3.75 cups of flour in the bag. She used 2.5 cups of flour to make the cake. How much flour is left in the bag?



- 1.0 cups
- 1.25 cups
- 1.5 cups
- 1.75 cups

9. Adriana rides her bike 2 miles every morning on weekdays. She rides 3 miles on Saturday and Sunday. Which expression shows the number of miles she rides during the week?

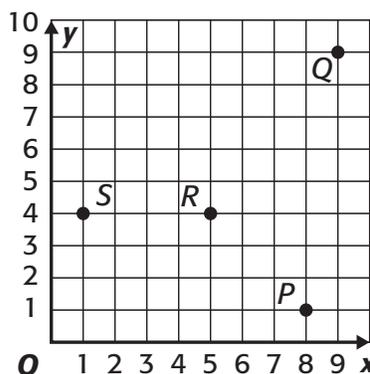
- $(2 \times 2) + (3 \times 5)$
- $(2 \times 3) \times (2 \times 5)$
- $(2 + 3) \times 7$
- $(2 \times 5) + (3 \times 2)$



10. Which represents the next three terms in the sequence 8, 16, 24, 32...?

- 36, 40, 44
- 64, 126, 256
- 40, 48, 56
- 72, 216, 648

Use the coordinate plane for Exercises 11 and 12.



11. Select the coordinates for point P.

- (5, 4)
- (1, 4)
- (9, 9)
- (8, 1)

12. Which point has the coordinates (5, 4)?

- P
- Q
- R
- S



Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the questions.

1. In the expression $9 + 5 \times 4$, which operation do you perform first?

Using order of operations, you multiply 5×4 first.

2. What is the solution of $9 + 5 \times 4$?

29

3. Tell how you got your answer.

Sample answer: I used order of operations and multiplied

5 and 4 to get 20, and then I added 9 to get 29.

4. What is the solution of $3^2 + 6 \div 2$?

12

5. Tell how you got your answer. **Sample answer:** I followed

the order of operations and found 3 squared first and

got 9, and then I divided 6 by 2 and got 3 and then added

9 and 3 to get 12.

6. Serena has a collection of 7 scarves. Her sister has 3 more scarves than Serena. How many scarves does her sister have?

10 scarves

Oral Assessment *(continued)*

7. Tell how you got your answer.

Sample answer: I thought, what is 3 more than 7?

7 plus 3 is equal to 10, so 10 is the solution.

8. Gus is twice as old as Genevieve. If Genevieve is 30, how old is Gus?

60 years old

9. Tell how you got your answer.

Sample answer: I multiplied 30 times 2, since Gus is

twice as old as Genevieve.

10. You need 100 square feet of flooring to cover the floor in each room. If you have 400 square feet of flooring, how many rooms can you cover with new flooring?

4 rooms

11. If you had 300 square feet of flooring, how many rooms could you cover with new flooring?

3 rooms

12. Tell how you got your answer.

Sample answer: I figured that if 100 square feet is enough flooring for one room, and $100 \times 3 = 300$, so there is enough for 3 rooms.

Am I Ready?

Practice

Write the factors of each number.

1. 15 1,3,5,15

2. 42 1,2,3,6,7,14,21,42

3. 9 1,9

4. 33 1,3,11,33

5. 13 1,13

6. 10 1,2,5,10

7. 20 1,2,4,5,10,20

8. 80 1,2,4,5,8,10,16,20,40,80

9. 100 1,2,4,5,10,20,25,50,100

Multiply or divide.

10. $18 \times 52 =$ 936

11. $36 \times 24 =$ 864

12. $27 \times 19 =$ 513

13. $58 \times 20 =$ 1,160

14. $570 \times 10 =$ 5,700

15. $406 \times 37 =$ 15,022

16. $100 \div 20 =$ 5

17. $1,400 \div 10 =$ 140

18. $75 \div 5 =$ 15

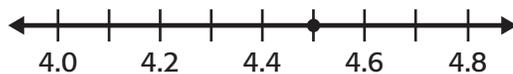
19. $384 \div 8 =$ 48

20. $66 \div 11 =$ 6

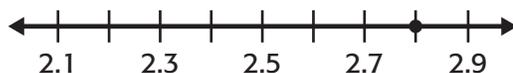
21. $180 \div 5 =$ 36

Graph each number on the number line provided.

22. 4.5



23. 2.8



Am I Ready?

Review

Find the factors of 20.

20

1×20

2×10

4×5

So, the factors of 20 are: 1, 2, 4, 5, 10, and 20.

Find the factors of each number.

1. 6 1, 2, 3, 6

2. 8 1, 2, 4, 8

3. 11 1, 11

4. 15 1, 3, 5, 15

5. 24 1, 2, 3, 4, 6, 8, 12, 24

6. 25 1, 5, 25

7. 30 1, 2, 3, 5, 6, 10, 15, 30

8. 33 1, 3, 11, 33

9. 36 1, 2, 3, 4, 6, 9, 12, 18, 36

10. 40 1, 2, 4, 5, 8, 10, 20, 40

11. 50 1, 2, 5, 10, 25, 50

12. 80 1, 2, 4, 5, 8, 10, 16, 20, 40, 80

Am I Ready?

Apply

Solve.

1. Jeremiah bought 3 sandwiches for lunch. If each sandwich cost \$4, how much did Jeremiah spend in all?

\$12

2. Sam practiced the guitar 30 minutes each day for 5 days. How many minutes did he practice in all?

150 min

3. Kenny opened a box of popsicles that included red, yellow, green, and orange popsicles. There were 24 popsicles in all. If there was an equal number of each color of popsicle, how many of each color of popsicle were in the bag?

6

4. Tammi spent a total of \$30 on magazines last week. Each magazine costs the same amount. If she bought 6 magazines, how much did each magazine cost?

\$5

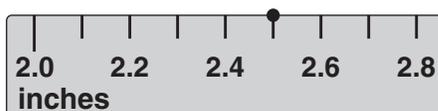
5. Manuel buys a video game that costs \$19. He wants to save his money to buy 5 more games at that amount. How much money does Manuel need to save?

\$95

6. Stuart donated 10 books to a charity fundraiser. The value of the books was \$80. If each book had the same value, what was the value of each book?

\$8

7. Ava was making a scrapbook for her art project. She needed to measure 2.5 inches of ribbon. Place a dot on the ruler to show 2.5 inches.



Diagnostic Test

Write all the factors of each number.

1. 25

2. 49

1. 1,5,25

3. 7

4. 34

2. 1,7,49

3. 1,7

5. 20

6. 60

4. 1,2,17,34

5. 1,2,4,5,10,20

6. 1,2,3,4,5,6,10,
12,15,20,30,60

Multiply or divide.

7. $17 \times 42 =$

8. $31 \times 28 =$

7. 714

8. 868

9. $29 \times 13 =$

10. $54 \times 20 =$

9. 377

11. $105 \div 15 =$

12. $1,200 \div 10 =$

10. 1,080

11. 7

13. $95 \div 5 =$

14. $472 \div 8 =$

12. 120

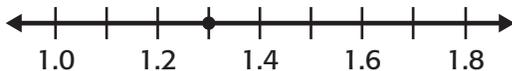
13. 19

14. 59

Graph each number on the number line provided.

15. 1.3

15–16. See students' work.



16. 3.4



Pretest

Tell whether each number is *prime* or *composite*.

1. 24

1. composite

2. 17

2. prime

Write the prime factorization of each number.

3. 28

3. $2 \times 2 \times 7$

4. 360

4. $2 \times 2 \times 2 \times 3 \times 3 \times 5$

Find the GCF of each set of numbers.

5. 36, 64

5. 4

6. 15, 45, 75

6. 15

7. 18, 12, 3

7. 3

Write each fraction in simplest form. If the fraction is already in simplest form, write *simplified*.

8. $\frac{5}{25}$

8. $\frac{1}{5}$

9. $\frac{8}{9}$

9. simplified

Find the LCM of each set of numbers.

10. 14, 7

10. 14

11. 3, 6, 15

11. 30

Write each fraction as a decimal.

12. $\frac{3}{10}$

12. 0.3

13. $\frac{1}{5}$

13. 0.2

Compare each fraction. Use the symbols $<$, $>$, or $=$.

14. $\frac{3}{5}$ \bullet $\frac{1}{2}$

14. $>$

15. $\frac{2}{3}$ \bullet $\frac{5}{6}$

15. $<$

Check My Progress *(Lessons 1 through 4)*

Represent each situation using a model. Then solve.

- Five people will equally share two pizzas. How much pizza will each person receive?
- Mr. Johansen is cutting construction paper for an art project. He has 24 students, and 6 large pieces of construction paper. How much paper will each student receive?
- Greg is pouring an entire gallon of milk into 10 glasses. What part of a gallon will be in each glass?
- Sara is cutting ribbon for a craft project. She has 4 feet of ribbon, which must be cut into 7 equal lengths. How long will each piece of ribbon be after she has finished cutting?

1. $\frac{2}{5}$ of a pizza

2. $\frac{1}{4}$ of a piece

3. $\frac{1}{10}$ of a gallon

4. $\frac{4}{7}$ ft

Find the GCF of each set of numbers.

- 6, 36
- 12, 24, 36
- 9, 18, 27
- 40, 50, 60

5. 6

6. 12

7. 9

8. 10

Write each fraction in simplest form. If the fraction is already in simplest form, write *simplified*.

9. $\frac{4}{8}$

10. $\frac{15}{25}$

11. $\frac{8}{9}$

9. $\frac{1}{2}$

10. $\frac{3}{5}$

11. **simplified**

Guess, check, and revise to solve.

- Evan went to the park and saw 4 animals. Each animal was either a duck or a dog. If he saw a total of 14 legs, how many of each animal did he see?

12. **3 dogs and 1 duck**

Vocabulary Test

Use the word bank below to complete each sentence. Write the correct words in the blank.

Word Bank	
common factor	fraction
denominator	numerator
common multiple	simplest form

1. A number that names equal parts of a whole or parts of a set is called a(n) fraction.
2. A whole number that is a multiple of two or more numbers is called a(n) common multiple.
3. The number above the line of a fraction showing the number of parts of the whole is called a(n) numerator.
4. When the numerator and the denominator have no common factor other than 1, the fraction is written in simplest form.
5. The number below the line of a fraction showing the number of parts the whole is divided into is called a(n) denominator.
6. A whole number that is a factor of two or more numbers is called a(n) common factor.

Answer the item below based on the vocabulary used in the chapter. **Underline the vocabulary terms you use.**

7. In $\frac{3}{4}$, identify the role of 3. Then explain how to read this number.

sample answer: 3 is the numerator of the fraction. You read the number as "three fourths".

Chapter Test, Form 1A *(continued)*

7. What is the LCM of 12 and 18?

- A. 28 C. 60
B. 36 D. 72

7. **B**

What symbol replaces each \bigcirc to make a true statement?

8. $\frac{3}{10} \bigcirc \frac{3}{5}$

- F. < G. > H. =

8. **F**

9. $\frac{1}{2} \bigcirc \frac{3}{4}$

- A. < B. > C. =

9. **A**

10. What decimal is equivalent to $\frac{3}{4}$?

- F. 0.50 H. 0.25
G. 0.33 I. 0.75

10. **I**

11. Sally is pouring an entire gallon of juice into 8 glasses. What part of a gallon will be in each glass?

- A. $\frac{1}{2}$ of a gallon C. $\frac{1}{4}$ of a gallon
B. $\frac{1}{3}$ of a gallon D. $\frac{1}{8}$ of a gallon

11. **D**

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which number is a prime number?

- A. 10 C. 8
B. 9 D. 7

1. **D**

2. Which number is a composite number?

- F. 3 H. 7
G. 5 I. 9

2. **I**

3. What is the simplest form of $\frac{3}{24}$?

- A. $\frac{1}{24}$ C. $\frac{1}{3}$
B. $\frac{1}{8}$ D. $\frac{1}{2}$

3. **B**

4. What is the GCF of 6 and 8?

- F. 2 H. 4
G. 3 I. 6

4. **F**

What is the prime factorization of each number?

5. 35

- A. $2 \times 2 \times 7$ C. 2×17
B. $2 \times 2 \times 5$ D. 5×7

5. **D**

6. 46

- F. 2×23 H. 2×20
G. 3×23 I. 2×18

6. **F**

Chapter Test, Form 1B *(continued)*

7. What is the LCM of 12 and 36?

- A. 6 C. 24
B. 12 D. 36

7. **D**

What symbol replaces each \bigcirc to make a true statement?

8. $\frac{2}{8} \bigcirc \frac{1}{4}$

- F. < G. > H. =

8. **H**

9. $\frac{3}{10} \bigcirc \frac{1}{8}$

- A. < B. > C. =

9. **B**

10. What decimal is equivalent to $\frac{4}{25}$?

- F. 0.25 H. 0.40
G. 0.16 I. 0.04

10. **G**

11. David is pouring an entire gallon of milk into 12 glasses. What part of a gallon will be in each glass?

- A. $\frac{1}{24}$ of a gallon C. $\frac{1}{6}$ of a gallon
B. $\frac{1}{12}$ of a gallon D. $\frac{1}{2}$ of a gallon

11. **B**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which number is a composite number?

- A. 5 C. 13
B. 7 D. 16

1. **D**

2. Which number is a prime number?

- F. 4 H. 9
G. 6 I. 11

2. **I**

3. What is the GCF of 6 and 15?

- A. 2 C. 5
B. 3 D. 7

3. **B**

What is the fraction in simplest form? If the fraction is already in simplest form, choose *simplified*.

4. $\frac{4}{16}$
F. $\frac{2}{8}$ H. $\frac{1}{8}$
G. $\frac{1}{4}$ I. *simplified*

4. **G**

What is the prime factorization of each number?

5. 56
A. 2×7 C. $2 \times 2 \times 2 \times 7$
B. $2 \times 2 \times 7$ D. $2 \times 2 \times 2 \times 7 \times 7 \times 7$

5. **C**

6. 98
F. 2×7 H. $2 \times 7 \times 7 \times 7$
G. $2 \times 7 \times 7$ I. $2 \times 2 \times 7 \times 7 \times 7$

6. **G**

Chapter Test, Form 2A (continued)

Read each question carefully. Write your answer on the line provided.

What is the least common mutiple (LCM) of each set of numbers?

7. 5, 6

7. 30

8. 3, 6, 8

8. 24

What symbol replaces each \bigcirc to make a true statement?

9. $\frac{2}{3} \bigcirc \frac{2}{5}$

9. >

10. $\frac{4}{5} \bigcirc \frac{7}{10}$

10. >

11. Charlotte is making a scrapbook. She needs a piece of ribbon that is $\frac{3}{4}$ ft long. What is that fraction written as a decimal?

11. 0.75 ft

12. Write $\frac{24}{25}$ as a decimal.

12. 0.96

13. Write $\frac{1}{2}$ as a decimal.

13. 0.5

14. Eight people will equally share two pizzas. How much pizza will each person receive?

14. $\frac{2}{8}$ of a pizza

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which number is a composite number?

- A. 7 C. 30
B. 29 D. 53

1. **C**

2. Which number is a prime number?

- F. 31 H. 33
G. 32 I. 36

2. **F**

3. What is the GCF of 8 and 12?

- A. 4 C. 8
B. 6 D. 12

3. **A**

What is the fraction in simplest form? If the fraction is already in simplest form, choose *simplified*.

4. $\frac{3}{24}$

- F. $\frac{2}{8}$ H. $\frac{1}{8}$

- G. $\frac{1}{4}$ I. *simplified*

4. **H**

What is the prime factorization of each number?

5. 88

- A. $2 \times 2 \times 2 \times 2 \times 11 \times 11 \times 11$ C. $2 \times 2 \times 2 \times 11 \times 11$

- B. $2 \times 2 \times 2 \times 2 \times 11 \times 11$ D. $2 \times 2 \times 2 \times 11$

5. **D**

6. 50

- F. $2 \times 5 \times 5$ H. $2 \times 2 \times 5 \times 5 \times 5$

- G. $2 \times 2 \times 5 \times 5$ I. $2 \times 2 \times 2 \times 5 \times 5 \times 5$

6. **F**

Chapter Test, Form 2B (continued)

Read each question carefully. Write your answer on the line provided.

What is the least common multiple (LCM) of each set of numbers?

7. 12, 18

7. 36

8. 4, 5, 6

8. 60

What symbol replaces each \bigcirc to make a true statement?

9. $\frac{6}{10} \bigcirc \frac{1}{5}$

9. >

10. $\frac{2}{5} \bigcirc \frac{4}{10}$

10. =

11. In science class, Paulette is growing a bean sprout. She measures the height of the sprout in inches every third day. Her measurements are $\frac{2}{10}$, $\frac{4}{5}$, and $\frac{3}{25}$. Write each of these fractions as decimals.

11. 0.2 in., 0.8 in., 0.12 in.

12. Write $\frac{13}{25}$ as a decimal.

12. 0.52

13. Write $\frac{3}{4}$ as a decimal.

13. 0.75

14. Ten people will equally share three pizzas. How much pizza will each person receive?

14. $\frac{3}{10}$ of a pizza

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Find the greatest common factor (GCF) of each set of numbers.

1. 34, 51, 102

1. 17

2. 18, 27, 63

2. 9

Write each fraction in simplest form. If the fraction is already in simplest form, write *simplified*.

3. $\frac{12}{96}$

3. $\frac{1}{8}$

4. $\frac{28}{185}$

4. simplified

Solve.

5. Mr. Ringwald is preparing trail mix for his upcoming hiking trip. The recipe calls for $\frac{3}{4}$ cup of peanuts. Write $\frac{3}{4}$ as a decimal.

5. 0.75 cup

6. Jasper measured the height of his dresser as $\frac{20}{25}$ of a yard. Write $\frac{20}{25}$ as a decimal.

6. 0.80 yard

Write each fraction as a decimal.

7. $\frac{13}{20}$

7. 0.65

8. $\frac{27}{50}$

8. 0.54

Chapter Test, Form 3A *(continued)*

Find the least common multiple (LCM) of each set of numbers.

9. 10, 16, 32 9. 160

10. 2, 6, 36 10. 36

Choose the number that is NOT a composite number.

11. 58, 61, 82, 122 11. 61

Choose the number that is NOT a prime number.

12. 29, 31, 37, 44 12. 44

Replace each \bigcirc with $<$, $>$, or $=$ to make a true statement.

13. $\frac{9}{10} \bigcirc \frac{18}{20}$ 13. =

14. $\frac{3}{7} \bigcirc \frac{1}{2}$ 14. <

Solve.

15. Mrs. Walker is cutting construction paper for an art project. She has 16 students, and 6 large pieces of construction paper. How much paper will each student receive? 15. $\frac{3}{8}$ of a piece

16. Charles rode his bike 19 miles each week while training. Here is his record of the number of miles he rode.

Monday	Tuesday	Wednesday	Thursday	Friday
2.2 mi	?	3.8 mi	?	5.4 mi

Charles rode 1.6 miles more on Thursday than on Tuesday. Find the number of miles he rode on Tuesday and Thursday. 16. Tues, 3 mi;
Thurs, 4.6 mi

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Find the greatest common factor (GCF) of each set of numbers.

1. 21, 30, 44

1. 1

2. 27, 54, 72

2. 9

Write each fraction in simplest form. If the fraction is already in simplest form, write *simplified*.

3. $\frac{28}{32}$

3. $\frac{7}{8}$

4. $\frac{4}{15}$

4. simplified

Solve.

5. Ms. Richards is baking brownies for the bake sale. The recipe requires $\frac{1}{4}$ cup of walnuts. Write $\frac{1}{4}$ as a decimal.

5. 0.25

6. Jasmyn measured her dog's height. Her dog is $\frac{8}{10}$ of a foot tall. Write $\frac{8}{10}$ as a decimal.

6. 0.8

Write each fraction as a decimal.

7. $\frac{3}{20}$

7. 0.15

8. $\frac{2}{4}$

8. 0.50

Chapter Test, Form 3B *(continued)*

Find the least common multiple (LCM) of each set of numbers.

9. 3, 5, 12

9. 60

10. 6, 16, 24

10. 48

Choose the number that is NOT a composite number.

11. 60, 61, 88, 134

11. 61

Choose the number that is NOT a prime number.

12. 59, 69, 79, 89

12. 69

Replace each \bigcirc with $<$, $>$, or $=$ to make a true statement.

13. $\frac{2}{6} \bigcirc \frac{2}{3}$

13. $<$

14. $\frac{3}{8} \bigcirc \frac{1}{4}$

14. $>$

Solve.

15. Mr. Green is cutting construction paper for an art project. He has 24 students, and 12 large pieces of construction paper. How much paper will each student receive?

15. $\frac{1}{2}$ of a piece

16. Kenyon ran for 8 miles each week while training. Here is his record of the number of miles he ran.

Monday	Tuesday	Wednesday	Thursday	Friday
1.2 mi	?	1.6 mi	?	2 mi

Kenyon ran 0.4 miles more on Thursday than on Tuesday. Find the number of miles he ran on Tuesday and Thursday.

16. Tues, 1.4 mi;
Thurs, 1.8 mi

Standardized Test Practice

Read each question. Then fill in the correct answer.

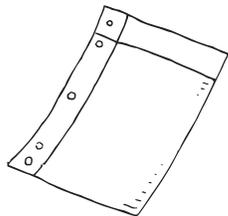
1. Chris has a total of 24 stickers in her collection. She has an equal number of stickers on all 8 pages of her sticker album. How many stickers are on each page?

- A 3 stickers
- B 4 stickers
- C 5 stickers
- D 6 stickers



2. Mr. Anderson asks Keith to help pass out papers. There are 420 papers to be passed out to 28 students. If each student receives the same number of papers, how many papers does each student receive?

- F 13 papers
- G 14 papers
- H 15 papers
- I 16 papers



3. While traveling on vacation, Isabella notices that the price for unleaded gasoline is \$2.79 and the price for diesel gasoline is \$3.81. How much more is the price of diesel than the price of unleaded?



- A \$1.20
- B \$1.02
- C \$0.20
- D \$0.02

4. The table shows the prices for different lunch items.

Lunch Menu	
Item	Price
Sandwich	\$2.39
Slice of pizza	\$2.29
Salad	\$2.09
Chips	\$0.79
Fruit cup	\$1.19
Milk	\$1.25
Juice	\$1.15

What is the total cost of a sandwich, fruit cup, and juice?

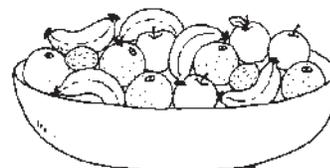
- F \$4.63
- G \$4.73
- H \$4.74
- I \$5.73

5. During the week Malia has piano practice for $\frac{3}{4}$ of an hour, soccer practice for $\frac{7}{8}$ of an hour, ballet for $\frac{1}{2}$ of an hour, and painting class for $\frac{1}{4}$ of an hour. Which of these activities does she spend the most time doing during the week?

- A ballet
- B soccer
- C painting
- D piano

6. Floyd is preparing a fruit salad. The recipe calls for 4 cups of fruit. Two of the cups of fruit are melon. What fraction of the fruit is melon?

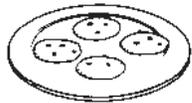
- A $\frac{1}{2}$
- B $\frac{1}{4}$
- C $\frac{3}{4}$
- D $\frac{4}{2}$



GO ON ►

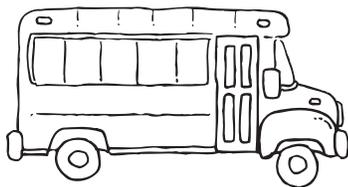
Standardized Test Practice *(continued)*

- 7.** Marion has 15 oatmeal cookies and 20 peanut butter cookies. If Marion gives each friend an equal number of each type of cookie, what is the greatest number of friends with whom he can share his cookies?



- (A) 10 friends (B) 5 friends
 (C) 8 friends (D) 2 friends

- 8.** The Line A bus arrives at the bus stop every 20 minutes, and the Line B bus arrives every 15 minutes. Both are at the bus stop right now. In how many minutes will both be at the bus stop again?



- (A) 60 minutes (B) 30 minutes
 (C) 45 minutes (D) 20 minutes

- 9.** Hot dogs are sold in packs of 10. Hot dog buns are sold in packs of 8. Elijah is having a party and is serving hot dogs with buns. What is the least number of hot dogs Elijah can make without having any buns or hot dogs leftover?



- (A) 20 (C) 28
 (B) 32 (D) 40

- 10.** Faith and Greg are sharing a pizza. Faith ate $\frac{7}{10}$ of the pizza, and Greg ate $\frac{3}{5}$ of the pizza. Write $\frac{7}{10}$ as a decimal.



- (F) 0.07 (G) 0.7
 (H) 0.33 (I) 7.0

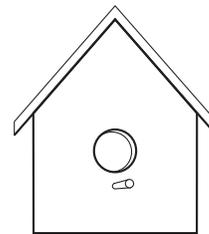
- 11.** Taylor rode her bike for a longer distance each day while training. Here is her record of the number of miles she rode.

Monday	Tuesday	Wednesday	Thursday	Friday
6.3 mi	7.6 mi	8.9 mi	?	11.5 mi

Based on the pattern, how far did she ride on Thursday?

- (A) 9.2 miles (C) 10 miles
 (B) 9.5 miles (D) 10.2 miles

- 12.** Michael is building a birdhouse. He needs a piece of wood that is $\frac{28}{50}$ feet in length. What is $\frac{28}{50}$ as a decimal?



- (A) 0.56 (C) 0.46
 (B) 0.55 (D) 0.24



Chapter Assessment Answer Key

Extended-Response Test, Page 206 Sample Answers

In addition to the scoring rubric found on page 207, the following sample answers may be used as guidance in evaluating open-ended assessment items.

1. a. The greatest number that is a common factor of two or more numbers is the greatest common factor.

b. Factors of 12: 1, 2, 3, 4, 6, 12
Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24
GCF: 12

2. a. Fractions that share the same relationship between part and whole are equivalent fractions.

$\frac{1}{3}$			
$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$

 $\frac{1}{3} = \frac{4}{12}$

b. Sample answer: A fraction has a numerator and a denominator. A decimal includes a decimal point.

c. improper fraction

3. No, because 25 is not evenly divisible by 4.

4. Sample answer: Write $\frac{3}{25}$ as a fraction with a denominator of 100. $\frac{3}{25} \times \frac{4}{4} = \frac{12}{100}$. Change to decimal 0.12.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

1. What are the first 6 multiples of 4?

0, 4, 8, 12, 16, 20

2. What are the first 6 multiples of 5?

0, 5, 10, 15, 20, 25

3. What is the least common multiple of 4 and 5?

20

4. How did you get your answer?

Sample answer: I listed the first 5 multiples of 4 and 5 and saw that 20 was the LCM.

5. What are the factors of 20?

1, 2, 4, 5, 10, and 20

6. What are the factors of 48?

1, 2, 3, 4, 6, 8, 12, 16, 24, and 48

7. What is the greatest common factor of 20 and 48?

4

Oral Assessment (continued)

Student	Amount Read
Alberto	$\frac{1}{2}$
Alma	$\frac{2}{4}$
Marta	$\frac{3}{4}$
Hugo	$\frac{1}{4}$

8. Mario read $\frac{4}{8}$ of his summer reading book. What other student(s) read the same fraction of his or her book?

Alberto and Alma

9. Who read the most of his or her book?

Marta

10. How did you get your answer?

Sample answer: I compared the fractions and saw that $\frac{3}{4}$ was the greatest.

11. What 2 students read the same amount?

Alberto and Alma

12. How did you get your answer?

Sample answer: $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent fractions.

13. Who read the least amount of his or her book?

Hugo

14. How did you get your answer?

Sample answer: I compared the fractions and saw that $\frac{1}{4}$ was the least.

Am I Ready?

Review

Find 256×4 .

$$\begin{array}{r}
 256 \\
 \times 4 \\
 \hline
 24 \quad (4 \times 6) \\
 200 \quad (4 \times 50) \\
 + 800 \quad (4 \times 200) \\
 \hline
 1,024
 \end{array}$$

Multiply.

1. $48 \times 3 = \underline{\mathbf{144}}$

2. $96 \times 6 = \underline{\mathbf{576}}$

3. $2,075 \times 4 = \underline{\mathbf{8,300}}$

4. $29 \times 1,000 = \underline{\mathbf{29,000}}$

5. $45 \times 100 = \underline{\mathbf{4,500}}$

6. $624 \times 100 = \underline{\mathbf{62,400}}$

7. $98 \div 7 = \underline{\mathbf{14}}$

8. $87 \div 29 = \underline{\mathbf{3}}$

9. $128 \div 16 = \underline{\mathbf{8}}$

10. $450 \div 30 = \underline{\mathbf{15}}$

11. $2,400 \div 100 = \underline{\mathbf{24}}$

12. $45,000 \div 100 = \underline{\mathbf{450}}$

13. Grover's market bought 55 packs of peppermint gum. The gum came in packs of 8 sticks. How many sticks of gum did the store buy?

440 sticks

14. Each classroom sold 100 raffle tickets for the school carnival. If there are 26 classrooms, how many total raffle tickets did the school sell?

2,600 tickets

Am I Ready?

Apply

Multiply or divide.

1. Granny's fruit stand sold 325 apples. Each person bought 13 apples. How many people bought apples?

25 people

2. Suni drinks 10 glasses of water each day. Each glass contains 8 ounces. How many total ounces of water does Suni drink each day?

80 ounces

3. Butter's Bakery bakes 21 dozen cookies each day. How many cookies do they bake in all?

252 cookies

4. Justin scored a total of 16,650 points on 3 video games. If he scored the same amount on each game, how many points did he score on each game?

5,550 points

5. Melinda took 325 pictures on vacation. She took the same amount of pictures each day. If she was on vacation for 5 days, how many pictures did she take each day?

65 pictures

6. Lillian rides her bike 15 miles each week. How many miles will she ride in 52 weeks?

780 miles

Diagnostic Test

Multiply.

1. $18 \times 3 =$

2. $27 \times 6 =$

1. 54

2. 162

3. $1,675 \times 4 =$

4. $12 \times 1,000 =$

3. 6,700

4. 12,000

5. $87 \times 100 =$

6. $901 \times 100 =$

5. 8,700

6. 90,100

7. The carnival sold 245 balloons each day for 7 days.
How many balloons were sold in all?

7. 1,715 balloons

Divide.

8. $75 \div 5 =$

9. $133 \div 19 =$

8. 15

9. 7

10. $135 \div 27 =$

11. $434 \div 14 =$

10. 5

11. 31

12. $1,500 \div 100 =$

13. $45,000 \div 100 =$

12. 15

13. 450

14. Mr. Callendar bought 245 pencils. The pencils came in packs of 5. How many packs of pencils did he buy?

14. 49 packs

Pretest**Add. Write in simplest form.**

1. $\frac{2}{5} + \frac{2}{5} =$

1. $\frac{4}{5}$

2. $3\frac{8}{9} + \frac{3}{9} =$

2. $4\frac{2}{9}$

3. $4\frac{5}{6} + 6\frac{2}{3} =$

3. $11\frac{1}{2}$

Solve.

4. Frank is putting up wallpaper in his bedroom. His bedroom measures $11\frac{1}{8}$ feet long and $9\frac{3}{4}$ feet wide. What is the perimeter of Frank's bedroom?

4. $41\frac{3}{4}$ ft

5. Yuli has a piece of wood that measures $4\frac{1}{5}$ feet. If each shelf she is making is $1\frac{4}{5}$ feet long, will she have enough for 3 shelves?

5. no

Estimate by rounding each mixed number to the nearest whole number.

6. $4\frac{4}{5} + 1\frac{4}{5} =$

6. 7

Subtract. Write in simplest form.

7. $17\frac{11}{16} - 9\frac{5}{16} =$

7. $8\frac{3}{8}$

8. $34\frac{7}{9} - 21\frac{2}{9} =$

8. $13\frac{5}{9}$

9. $3\frac{1}{4} - 2\frac{2}{4} =$

9. $\frac{3}{4}$

10. $17 - 5\frac{3}{4} =$

10. $11\frac{1}{4}$

Check My Progress *(Lessons 1 through 5)*

Round each fraction to 0, $\frac{1}{2}$, or 1.

1. $\frac{7}{9}$

1. 1

2. $\frac{2}{10}$

2. 0

3. $\frac{3}{8}$

3. $\frac{1}{2}$

4. $\frac{1}{6}$

4. 0

Add. Write the sum in simplest form.

5. $\frac{4}{7} + \frac{2}{7} =$

5. $\frac{6}{7}$

6. $\frac{1}{9} + \frac{7}{9} =$

6. $\frac{8}{9}$

7. $\frac{1}{3} + \frac{2}{9} =$

7. $\frac{5}{9}$

8. $\frac{2}{3} + \frac{1}{4} =$

8. $\frac{11}{12}$

9. $\frac{3}{8} + \frac{3}{4} =$

9. $1\frac{1}{8}$

Subtract. Write the difference in simplest form.

10. $\frac{4}{7} - \frac{3}{7} =$

10. $\frac{1}{7}$

11. $\frac{12}{16} - \frac{8}{16} =$

11. $\frac{1}{4}$

12. Find the difference between *six ninths* and *four ninths*.
Write your answer in words.

12. two ninths

Check My Progress (Lessons 6 through 9)**Subtract. Write the difference in simplest form.**

1. $\frac{3}{4} - \frac{1}{3} =$

2. $\frac{8}{9} - \frac{2}{3} =$

3. $\frac{7}{10} - \frac{1}{5} =$

1. $\frac{5}{12}$

2. $\frac{2}{9}$

3. $\frac{1}{2}$

Estimate by rounding each mixed number to the nearest whole number.

4. $4\frac{3}{5} + 1\frac{1}{5} =$

5. $2\frac{1}{9} + 6\frac{7}{9} =$

6. $\frac{10}{12} + \frac{11}{12} =$

4. $5 + 1 = 6$

5. $2 + 7 = 9$

6. $1 + 1 = 2$

Solve. Determine which answer is reasonable.

7. Andy has a stamp collection with 343 stamps. Of these, 296 are from Germany. Is 40, 50, or 60 a more reasonable estimate for how many stamps are from other countries?

8. Mrs. Dean harvested $1\frac{1}{4}$ pounds of green peppers, $2\frac{1}{4}$ pounds of yellow peppers, and $5\frac{1}{4}$ pounds of red peppers from her garden. Is 8 pounds, 9 pounds, or 10 pounds a more reasonable estimate for how many pounds of peppers she harvested altogether?

9. A marker costs \$0.99. A pad of paper costs \$1.25 more than the marker. Which is a more reasonable estimate for the total cost of both items: \$2 or \$3?

Ex 7-9, sample answers given.

7. 40

8. 8 pounds

9. $\$3$

Vocabulary Test

Match each description to its vocabulary term. Write your answers on the lines provided.

A. a number formed by a whole number and a fraction

1. denominator _____ **H** _____

B. not an exact answer

2. estimate _____ **B** _____

C. changing a number to its closest whole number in order to make multiplication easier

3. like fractions _____ **E** _____

D. the form used when the greatest common factor of the numerator and the denominator is 1

4. mixed number _____ **A** _____

E. fractions with the same denominators

5. numerator _____ **G** _____

F. fractions with different denominators

6. rounding _____ **C** _____

G. the top number in a fraction

7. simplest form _____ **D** _____

H. the bottom number in a fraction

8. unlike fractions _____ **F** _____

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression? Write each sum in simplest form.

1. $\frac{3}{6} + \frac{1}{6} =$

A. $\frac{1}{3}$

B. $\frac{2}{3}$

C. $\frac{4}{6}$

D. $\frac{3}{3}$

1. _____ **B**

2. $\frac{2}{9} + \frac{1}{3} =$

F. $\frac{5}{9}$

G. $\frac{2}{3}$

H. $\frac{7}{9}$

I. $\frac{8}{9}$

2. _____ **F**

3. $1\frac{2}{3} + 4\frac{2}{3} =$

A. $5\frac{1}{3}$

B. $5\frac{2}{3}$

C. $6\frac{1}{3}$

D. $6\frac{2}{3}$

3. _____ **C**

4. $11\frac{7}{8} + 7\frac{1}{4} =$

F. $18\frac{1}{8}$

G. $18\frac{7}{8}$

H. $19\frac{1}{8}$

I. $19\frac{1}{4}$

4. _____ **H**

Which is the best estimate of each expression?

5. $3\frac{3}{5} + 1\frac{1}{5} =$

A. 4

B. 5

C. 6

D. 7

5. _____ **B**

6. $2\frac{5}{6} + 9\frac{2}{12} =$

F. 11

G. 12

H. 13

I. 14

6. _____ **G**

Chapter Test, Form 1A (continued)

What is the value of each expression? Write each difference in simplest form.

7. $\frac{7}{8} - \frac{1}{2} =$

A. $\frac{1}{8}$

B. $\frac{2}{8}$

C. $\frac{1}{4}$

D. $\frac{3}{8}$

7. **D**

8. $\frac{7}{9} - \frac{2}{9} =$

F. $\frac{3}{9}$

G. $\frac{4}{9}$

H. $\frac{5}{9}$

I. $\frac{9}{9}$

8. **H**

9. $8\frac{3}{8} - 3\frac{1}{8} =$

A. $5\frac{1}{8}$

B. $5\frac{1}{4}$

C. $6\frac{1}{4}$

D. $6\frac{3}{4}$

9. **B**

10. $12\frac{9}{10} - 4\frac{1}{5} =$

F. $8\frac{7}{10}$

G. $8\frac{1}{5}$

H. $7\frac{2}{10}$

I. $7\frac{1}{10}$

10. **F**

11. $5\frac{2}{5} - 3\frac{1}{3} =$

A. $1\frac{3}{5}$

B. $1\frac{4}{5}$

C. $2\frac{1}{15}$

D. $2\frac{3}{5}$

11. **C**

12. $10\frac{5}{8} - 6\frac{7}{8} =$

F. $3\frac{1}{4}$

G. $3\frac{1}{2}$

H. $3\frac{3}{4}$

I. 4

12. **H**

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression? Write each sum in simplest form.

1. $\frac{1}{6} + \frac{2}{6} =$

A. $\frac{1}{3}$

B. $\frac{1}{2}$

C. $\frac{2}{3}$

D. $\frac{5}{6}$

1. **B**

2. $\frac{1}{3} + \frac{4}{9} =$

F. $\frac{5}{9}$

G. $\frac{2}{3}$

H. $\frac{7}{9}$

I. $\frac{8}{9}$

2. **H**

3. $2\frac{1}{3} + 4\frac{1}{3} =$

A. $5\frac{1}{3}$

B. $5\frac{2}{3}$

C. $6\frac{1}{3}$

D. $6\frac{2}{3}$

3. **D**

4. $10\frac{1}{2} + 8\frac{3}{4} =$

F. $18\frac{1}{8}$

G. $18\frac{7}{8}$

H. $19\frac{1}{8}$

I. $19\frac{1}{4}$

4. **I**

Which is the best estimate of each expression?

5. $4\frac{1}{5} + 1\frac{1}{5} =$

A. 4

B. 5

C. 6

D. 7

5. **B**

6. $1\frac{1}{6} + 10\frac{1}{6} =$

F. 11

G. 12

H. 13

I. 14

6. **F**

Chapter Test, Form 1B (continued)

What is the value of each expression? Write each difference in simplest form.

7. $\frac{7}{8} - \frac{3}{8} =$

A. $\frac{1}{8}$

B. $\frac{2}{8}$

C. $\frac{3}{8}$

D. $\frac{1}{2}$

7. _____ **D** _____

8. $\frac{2}{3} - \frac{2}{9} =$

F. $\frac{3}{9}$

G. $\frac{4}{9}$

H. $\frac{5}{9}$

I. $\frac{9}{9}$

8. _____ **G** _____

9. $6\frac{3}{8} - 2\frac{2}{16} =$

A. $4\frac{1}{4}$

B. $5\frac{1}{4}$

C. $6\frac{1}{4}$

D. $6\frac{3}{4}$

9. _____ **A** _____

10. $12\frac{3}{5} - 3\frac{7}{10} =$

F. $7\frac{1}{10}$

G. $8\frac{1}{10}$

H. $8\frac{9}{10}$

I. $9\frac{2}{10}$

10. _____ **H** _____

11. $5\frac{1}{5} - 2\frac{4}{5} =$

A. $1\frac{3}{5}$

B. $1\frac{4}{5}$

C. $2\frac{2}{5}$

D. $2\frac{3}{5}$

11. _____ **C** _____

12. $8\frac{1}{2} - 6\frac{7}{8} =$

F. $1\frac{5}{8}$

G. $2\frac{6}{8}$

H. $3\frac{3}{4}$

I. 4

12. _____ **F** _____

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression? Write in simplest form.

1. $\frac{1}{9} + \frac{1}{6} =$

A. $\frac{5}{18}$

B. $\frac{2}{9}$

C. $\frac{1}{6}$

D. $\frac{1}{18}$

1. **A**

2. $\frac{4}{9} + \frac{2}{9} =$

F. $\frac{5}{9}$

G. $\frac{2}{3}$

H. $\frac{7}{9}$

I. $\frac{8}{9}$

2. **G**

3. $\frac{5}{9} - \frac{1}{3} =$

A. $\frac{2}{9}$

B. $\frac{3}{9}$

C. $\frac{4}{9}$

D. $\frac{9}{9}$

3. **A**

4. $\frac{7}{8} - \frac{5}{8} =$

F. $\frac{1}{8}$

G. $\frac{2}{8}$

H. $\frac{1}{4}$

I. $\frac{3}{8}$

4. **H**

Which is the best estimate of each expression?

5. $3\frac{1}{6} + 5\frac{1}{6} =$

A. 8

B. 10

C. 11

D. 14

5. **A**

6. $3\frac{1}{5} + 6\frac{1}{5} =$

F. 4

G. 5

H. 9

I. 10

6. **H**

Chapter Test, Form 2A (continued)

Read each question carefully. Write your answer on the line provided.

7. What is the value of $10\frac{3}{8} + 2\frac{1}{8}$?

7. $12\frac{1}{2}$

8. What is the value of $12\frac{1}{5} - 3\frac{9}{10}$?

8. $8\frac{3}{10}$

Add or subtract. Write in simplest form.

9. $6\frac{1}{5} - 3\frac{4}{5} =$

9. $2\frac{2}{5}$

10. $5\frac{1}{8} - 2\frac{7}{8} =$

10. $2\frac{1}{4}$

11. $8\frac{3}{4} + 5\frac{3}{4} =$

11. $14\frac{1}{2}$

Solve.

12. A store sells $14\frac{2}{3}$ pounds of carrots one day. The next day the store sells $2\frac{1}{3}$ pounds of carrots. How many pounds of carrots did the store sell?

12. **17 pounds**

13. Ian read for $\frac{1}{4}$ hour today. He read for $\frac{2}{3}$ hour yesterday. How much longer did Ian spend reading yesterday than today?

13. $\frac{5}{12}$ hour

14. Rey feeds his dog $\frac{2}{5}$ of a can of dog food in the morning and $\frac{4}{5}$ of a can in the evening. How many cans of dog food will Rey need in order to feed his dog for five days?

14. **6 cans**

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

What is the value of each expression? Write in simplest form.

1. $\frac{3}{6} + \frac{1}{8} =$

A. $\frac{1}{8}$

B. $\frac{11}{24}$

C. $\frac{13}{24}$

D. $\frac{5}{8}$

1. **D**

2. $\frac{1}{9} + \frac{4}{9} =$

F. $\frac{5}{9}$

G. $\frac{2}{3}$

H. $\frac{7}{9}$

I. $\frac{8}{9}$

2. **F**

3. $\frac{8}{9} - \frac{1}{3} =$

A. $\frac{3}{9}$

B. $\frac{4}{9}$

C. $\frac{5}{9}$

D. $\frac{9}{9}$

3. **C**

4. $\frac{6}{8} - \frac{3}{8} =$

F. $\frac{1}{8}$

G. $\frac{2}{8}$

H. $\frac{3}{8}$

I. $\frac{1}{2}$

4. **H**

Which is the best estimate of each expression?

5. $1\frac{5}{6} + 10\frac{1}{6} =$

A. 11

B. 12

C. 13

D. 14

5. **B**

6. $3\frac{2}{5} + 1\frac{1}{5} =$

F. 4

G. 5

H. 6

I. 7

6. **F**

Chapter Test, Form 2B (continued)

Read each question carefully. Write your answer on the line provided.

7. What is the value of $6\frac{1}{8} - 2\frac{3}{8}$?

7. $3\frac{3}{4}$

8. What is the value of $2\frac{3}{5} + 1\frac{7}{10}$?

8. $4\frac{3}{10}$

Add or subtract. Write in simplest form.

9. $4\frac{1}{5} - 1\frac{3}{5} =$

9. $2\frac{3}{5}$

10. $4\frac{3}{8} + 2\frac{1}{4} =$

10. $6\frac{5}{8}$

11. $8\frac{1}{4} - 3\frac{3}{4} =$

11. $4\frac{1}{2}$

Solve.

12. A store sells $\frac{3}{5}$ pound of carrots and $\frac{1}{3}$ pound of asparagus. How many more pounds of carrots did the store sell?

12. $\frac{4}{15}$ pound

13. Annie spent $3\frac{1}{3}$ hours reading a novel and $1\frac{1}{3}$ hours reading poetry. How many hours did Annie spend reading?

13. $4\frac{2}{3}$ hours

14. Rafi feeds his cat $\frac{5}{6}$ of a can of cat food in the morning and $\frac{2}{3}$ of a can in the evening. How many cans of cat food will Rafi need in order to feed his cat for six days?

14. 9 cans

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Add. Write in simplest form.

1. $\frac{2}{6} + \frac{1}{4} =$

1. $\frac{7}{12}$

2. $\frac{3}{9} + \frac{2}{9} =$

2. $\frac{5}{9}$

Subtract. Write in simplest form.

3. $\frac{4}{9} - \frac{2}{9} =$

3. $\frac{2}{9}$

4. $\frac{7}{8} - \frac{1}{2} =$

4. $\frac{3}{8}$

Add or subtract. Write in simplest form.

5. $3\frac{5}{6} + 5\frac{10}{12} =$

5. $9\frac{2}{3}$

6. $10\frac{1}{8} + 2\frac{1}{4} =$

6. $12\frac{3}{8}$

7. $7\frac{3}{10} - 3\frac{9}{10} =$

7. $3\frac{2}{5}$

8. $4\frac{2}{5} + 3\frac{4}{5} =$

8. $8\frac{1}{5}$

9. $7\frac{1}{4} - 2\frac{7}{8} =$

9. $4\frac{3}{8}$

10. $9\frac{3}{4} - 6\frac{9}{12} =$

10. 3

Chapter Test, Form 3A (continued)**Solve.**

11. A store sells $10\frac{1}{3}$ pounds of potatoes one day. The next day the store sells $2\frac{1}{3}$ pounds of potatoes. How many pounds of potatoes did the store sell in all? **11. $12\frac{2}{3}$ pounds**
12. Tammy read for $\frac{1}{3}$ hour today. She read for $\frac{1}{6}$ hour yesterday. How many hours did Tammy read in all? **12. $\frac{1}{2}$ hour**
13. Rhiannon is making a frame for a picture she drew. The length of the picture is $12\frac{1}{2}$ inches, and the width of the picture is $8\frac{3}{5}$ inches. How much longer is the picture than it is wide? **13. $3\frac{9}{10}$ in.**
14. Stephen and Jon are calculating their combined height. Stephen is $5\frac{5}{6}$ feet tall, and Jon is $5\frac{7}{12}$ feet tall. What is Stephen and Jon's combined height? **14. $11\frac{5}{12}$ ft**
15. Charlie is cutting a $10\frac{3}{8}$ -foot piece of wood to make shelves for his bedroom. Does Charlie have enough wood to make four shelves measuring $2\frac{5}{8}$ feet each? **15. **no****
16. Dionne is finding the dimensions of her closet door. The closet door is $6\frac{2}{5}$ feet tall and $2\frac{7}{8}$ feet wide. What is the best estimate for how much taller is the closet door than it is wide? **16. **3 feet****

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Add. Write in simplest form.

1. $\frac{5}{6} + \frac{1}{9} =$

1. $\frac{17}{18}$

2. $\frac{3}{9} + \frac{4}{9} =$

2. $\frac{7}{9}$

Subtract. Write in simplest form.

3. $\frac{8}{12} - \frac{3}{12} =$

3. $\frac{5}{12}$

4. $\frac{7}{8} - \frac{1}{3} =$

4. $\frac{13}{24}$

Add or subtract. Write in simplest form.

5. $1\frac{5}{6} + 10\frac{1}{6} =$

5. 12

6. $6\frac{2}{8} - 2\frac{7}{8} =$

6. $3\frac{3}{8}$

7. $12\frac{3}{5} + 1\frac{7}{10} =$

7. $14\frac{3}{10}$

8. $14\frac{1}{15} - 11\frac{4}{15} =$

8. $2\frac{4}{5}$

9. $4\frac{1}{6} - 2\frac{7}{18} =$

9. $1\frac{7}{9}$

10. $8\frac{1}{14} + 3\frac{3}{14} =$

10. $11\frac{2}{7}$

Chapter Test, Form 3B (continued)**Solve.**

- 11.** A store sells $15\frac{2}{3}$ pounds of carrots, $12\frac{1}{3}$ pounds of asparagus, and $3\frac{2}{3}$ pounds of cabbage. How many pounds did the store sell altogether?
- 11.** 31 $\frac{2}{3}$ pounds
- 12.** Estrella spent the weekend reading. On Friday night, she read for $\frac{1}{3}$ hour. On Saturday, she read for $\frac{1}{6}$ hour, and on Sunday she read for $\frac{1}{4}$ hour. How many hours did Estrella spend reading?
- 12.** $\frac{3}{4}$ hour
- 13.** Tina is making a frame for a picture she drew. The length of the picture is $11\frac{1}{9}$ inches, and the width of the picture is $7\frac{1}{4}$ inches. How much longer is the picture than it is wide?
- 13.** $3\frac{31}{36}$ in.
- 14.** Jay and David are calculating their combined height. Jay is $5\frac{3}{4}$ feet tall, and David is $6\frac{1}{8}$ feet tall. What is Jay and David's combined height?
- 14.** $11\frac{7}{8}$ ft
- 15.** Dulé is cutting a $12\frac{4}{5}$ -foot piece of wood to make shelves for his bedroom. Does Dulé have enough wood to make four shelves measuring $2\frac{7}{8}$ feet each?
- 15.** yes
- 16.** Elizabeth is finding the dimensions of her bedroom door. The bedroom door is $6\frac{3}{8}$ feet tall and $2\frac{5}{8}$ feet wide. What is the best estimate for how much taller is the bedroom door than it is wide?
- 16.** 3 feet

Standardized Test Practice

Read each question. Then fill in the correct answer.

1. There are 980 students enrolled at Milltown Middle School. There are 35 different classrooms in the school. If each classroom has the same number of students, how many students are in each classroom?



- (A) 25 students (C) 30 students
 (B) 28 students (D) 33 students

3. How many teaspoons of baking soda and ground cinnamon are used altogether?

- (A) 2 tsp (C) $2\frac{1}{2}$ tsp
 (B) $2\frac{1}{4}$ tsp (D) $2\frac{3}{4}$ tsp

4. Fina bought a DVD player for \$58.97 and a set of DVDs for \$24.98. How much did Fina spend in all?

- (F) \$84.95 (H) \$73.95
 (G) \$83.95 (I) \$83.85

Use the table to answer Exercises 2 and 3.

Dessert Recipe	
Item	Quantity (teaspoons)
Baking Soda	$1\frac{1}{4}$
Salt	1
Ground Cinnamon	$1\frac{1}{2}$
Ground Mace	$\frac{1}{2}$
Ground Nutmeg	$\frac{1}{8}$
Ground Cloves	$\frac{1}{8}$
Vanilla	$1\frac{1}{8}$

2. How many teaspoons of ground nutmeg and ground cloves are used altogether?

- (F) $\frac{1}{7}$ tsp (H) $\frac{1}{3}$ tsp
 (G) $\frac{1}{4}$ tsp (I) $\frac{1}{2}$ tsp

5. On Tuesday it rained $\frac{3}{4}$ of an inch. On Wednesday it rained $\frac{1}{4}$ of an inch. How much more rain fell on Tuesday than on Wednesday?

- (A) 1 inch
 (B) $\frac{1}{2}$ inch
 (C) $\frac{1}{4}$ inch
 (D) $\frac{3}{4}$ inch



6. Lucas took his bike to a local park to ride on some bike trails. Trail A is $6\frac{3}{4}$ miles long. Trail B is $8\frac{1}{2}$ miles long. How many miles longer is Trail B than Trail A?

- (F) 15 miles
 (G) $1\frac{1}{2}$ miles
 (H) $1\frac{3}{4}$ miles
 (I) 1 mile



GO ON ►

Standardized Test Practice *(continued)*

7. During the week Graham has guitar practice for $\frac{3}{4}$ of an hour, baseball practice for $\frac{7}{8}$ of an hour, and karate for $\frac{1}{4}$ of an hour. How much time does Graham spend altogether at guitar practice, baseball practice, and karate during the week?

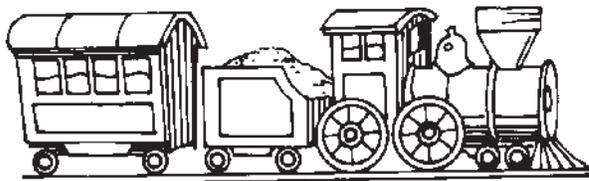
- (A) 1 hour (C) $1\frac{1}{8}$ hours
 (B) $1\frac{7}{8}$ hours (D) $1\frac{4}{8}$ hours

8. Benito has 42 orange juice boxes and 36 grape juice boxes. If Benito gives each friend an equal number of each type of juice box, what is the greatest number of friends with whom he can share his juice boxes?

- (F) 7 friends
 (G) 6 friends
 (H) 5 friends
 (I) 4 friends

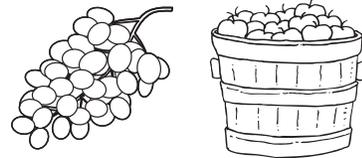


9. Train A arrives at the train station every 30 minutes, and Train B arrives every 40 minutes. Both are at the train station right now. In how many minutes will both be at the train station again?



- (A) 120 minutes
 (B) 90 minutes
 (C) 60 minutes
 (D) 30 minutes

10. Sunil is preparing a fruit medley for an upcoming party. The recipe requires $3\frac{2}{3}$ cups of grapes and $4\frac{1}{4}$ cups of apples. How many more cups of apples are in the fruit medley than grapes?



- (F) 2 cups (H) $\frac{3}{4}$ cup
 (G) $1\frac{1}{4}$ cups (I) $\frac{7}{12}$ cup

11. Nami recorded the height of her sunflower each week. The table below shows her record.

Week 1	Week 2	Week 3	Week 4	Week 5
4.3 cm	5.6 cm	6.9 cm	8.2 cm	

If the pattern continues, how tall will her sunflower be in Week 5?

- (A) 9.2 cm (C) 10 cm
 (B) 9.5 cm (D) 10.2 cm

12. Four quarters in a football game lasted $1\frac{1}{2}$ hours. The game went into overtime and the team played for another $\frac{1}{4}$ hour. How long did the football game and overtime last altogether?

- (F) 2 hours
 (G) $1\frac{3}{4}$ hours
 (H) $1\frac{1}{2}$ hours
 (I) $1\frac{1}{4}$ hours

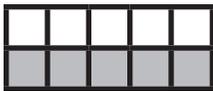


Chapter Assessment Answer Key

Extended-Response Test, Page 232 Sample Answers

In addition to the scoring rubric found on page 233, the following sample answers may be used as guidance in evaluating open-ended assessment items.

1. A fraction is a number that means parts of a whole. $\frac{1}{2}$ is a fraction. This is a drawing of the fraction $\frac{1}{2}$. There are 10 sections and 5 of the sections are shaded. $\frac{5}{10} = \frac{1}{2}$, so this is a drawing of $\frac{1}{2}$.



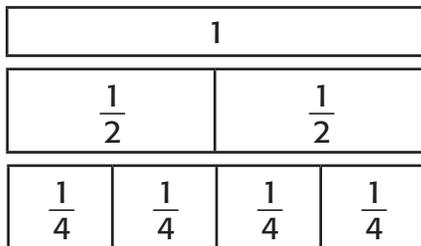
2. $\frac{13}{18}$ of the apples are still on the tree.
- a. A numerator is the part of the fraction that tells how many of the equal parts are being used. Namid ate $\frac{3}{18}$ of the apples, 3 is the numerator.
- b. A denominator is the bottom number in a fraction. Namid ate $\frac{3}{18}$ of the apples, 18 is the denominator.
- c. Namid ate $\frac{3}{18}$ of the apples and $\frac{2}{18}$ of the apples fell to the ground. $\frac{3}{18} + \frac{2}{18} = \frac{5}{18}$. So, $\frac{5}{18}$ of the apples are no longer on the tree.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Use construction paper to cut out the following labeled shapes:



Read each question aloud to the student. Then write the student's answers on the lines below the questions.

1. How are these shapes labeled?

One is labeled 1, another is labeled $\frac{1}{2}$ and $\frac{1}{2}$, and

the third is divided into four equal sections labeled $\frac{1}{4}$.

2. Line these shapes up against each other. Are all the shapes the same length?

Yes

3. Look at the shape labeled 1 and the shape labeled $\frac{1}{2}$ and $\frac{1}{2}$. Put them next to each other. What do you notice?

Sample answer: One of the shapes is divided into halves or into 2 equal sections.

4. Look at the shape labeled $\frac{1}{2}$ and $\frac{1}{2}$. What does $\frac{1}{2}$ and $\frac{1}{2}$ equal?

Sample answer: $\frac{1}{2} + \frac{1}{2} = 1$

5. Hold the shape labeled 1 next to the shape with labeled $\frac{1}{2}$ and $\frac{1}{2}$. Is your sentence correct? How do you know?

Sample answer: The two shapes are the same length, so $\frac{1}{2} + \frac{1}{2} = 1$.

Oral Assessment *(continued)*

6. Now let's look at the shape labeled $\frac{1}{4}$. How is it different from the first two shapes?

Sample answer: It is divided into 4 equal sections.

7. Let's look at the shape with sections labeled $\frac{1}{4}$ next to the shape labeled 1. Are these shapes the same length?

yes

8. How many $\frac{1}{4}$ sections are equal to the shape labeled 1?

4

9. How do you know?

Sample answer: I counted them.

10. Tell a number sentence about the shape with sections labeled $\frac{1}{4}$.

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 1$$

11. Look at the shape labeled $\frac{1}{2} + \frac{1}{2}$ next to the shape labeled $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$. Tell how these shapes are related.

Sample answer: $\frac{1}{2} + \frac{1}{2}$ is equal to $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$.

12. How do you know?

Sample answer: I can see that the shapes are the same length.

Am I Ready?

Practice

Estimate by rounding each mixed number to the nearest whole number.

1. $8\frac{4}{5} + 4\frac{9}{10} =$
about 14

2. $35\frac{6}{7} + 30\frac{1}{5} =$
about 66

3. $12\frac{1}{3} - 2\frac{1}{6} =$
about 10

4. Stan practiced his trumpet for $1\frac{1}{6}$ hours. Then he did his homework for $2\frac{1}{4}$ hours. About how much time did he spend on the two activities?

Sample answer: $1 + 2 = 3$ hours

Estimate. Use rounding or compatible numbers.

5. $496 \div 11 =$
about 50

6. $102 \times 9 =$
about 900

7. $323 \div 82 =$
about 4

8. Mr. Thomas has 238 bottles of water for the runners in the marathon. He wants to put these into boxes that hold 12 bottles each. About how many boxes will he need?

Sample answer: $240 \div 12 = 20$ boxes

Add or subtract. Write in simplest form.

9. $\frac{2}{3} + \frac{1}{3} =$ $\frac{1}{3}$

10. $\frac{2}{5} - \frac{1}{5} =$ $\frac{1}{5}$

11. $\frac{2}{9} + \frac{2}{3} =$ $\frac{8}{9}$

12. $\frac{6}{7} - \frac{3}{4} =$ $\frac{3}{28}$

13. $\frac{3}{4} + \frac{2}{3} =$ $1\frac{5}{12}$

14. $\frac{2}{3} - \frac{1}{3} =$ $\frac{1}{3}$

Am I Ready?

Review

To estimate the answer to a problem, use rounding or compatible numbers.

Rounding	Compatible Numbers
<p>Find $3\frac{7}{8} - 1\frac{1}{4}$.</p> <p>$3\frac{7}{8}$ is about 4. $1\frac{1}{4}$ is about 1.</p> $\begin{array}{r} 3\frac{7}{8} - 1\frac{1}{4} \\ \downarrow \quad \downarrow \\ 4 - 1 = 3 \end{array}$ <p>So, $3\frac{7}{8} - 1\frac{1}{4}$ is about 3.</p>	<p>Find $331 \div 43$.</p> <p>320 and 40 are compatible numbers since $32 \div 4 = 8$</p> $331 \div 43 \approx 320 \div 40$ ≈ 8 <p>So, $331 \div 43$ is about 8.</p>

Estimate. Use rounding or compatible numbers.

1. $633 \div 94 =$

about 7

2. $6\frac{1}{6} + 2\frac{7}{8} =$

about 9

3. $48 \times 11 =$

about 500

4. $12\frac{1}{5} - 8\frac{1}{4} =$

about 4

5. $601 \div 23 =$

about 30

6. $5\frac{1}{8} + 1\frac{8}{9} =$

about 7

7. $89 \times 5 =$

about 450

8. $8\frac{1}{3} - 2\frac{2}{3} =$

about 5

9. $163 \div 44 =$

about 4

10. $8\frac{5}{6} + 2\frac{1}{8} =$

about 11

11. $48 \times 6 =$

about 300

12. $1\frac{5}{6} - 1\frac{1}{9} =$

about 1

Am I Ready?

Apply

Solve. Use rounding or compatible numbers. Sample answers given.

1. The Apple Hill Orchard is selling bags of apples. Each bag contains 20 apples. About how many bags will be needed for 803 apples?

$$\mathbf{800 \div 20 = 40 \text{ bags}}$$

2. Jeremy sells bags of dog biscuits. Each bag costs \$0.95. He wants to sell enough biscuits to make \$100. About how many bags of dog biscuits does he need to sell?

$$\mathbf{\$100 \div \$1 = 100 \text{ bags}}$$

3. Maureen spent $\frac{3}{4}$ hour at the music store in the mall, $\frac{1}{6}$ hour at the jewelry shop, and $1\frac{1}{8}$ hours with friends at the food court. About how much time did she spend in all?

$$\mathbf{1 + 0 + 1 = 2 \text{ hours}}$$

4. Steven has \$87 in his savings account. He wants to buy a new bicycle for \$152. About how much more money does he need in order to be able to buy the bicycle?

$$\mathbf{\$150 - \$90 = \$60}$$

5. Joyce and her family are driving 178 miles to visit relatives. The speed limit on the highway is 65 miles per hour. About how many hours will it take them to get there?

$$\mathbf{180 \div 60 = 3 \text{ hours}}$$

6. Mr. Edwards has a farm that is 348 acres. He decides to break it into 5 equal sections and plant a different crop in each section. About how many acres are in each section?

$$\mathbf{350 \div 5 = 70 \text{ acres}}$$

7. In the donut shop, Tony is making 8 trays of chocolate-covered donuts. There are 24 donuts on each tray. If he has made 3 trays, about how many more donuts does he have to make?

$$\mathbf{5 \times 20 = 100 \text{ donuts}}$$

8. Sarah is volunteering at a fundraising event for a local charity. She packs snack bags for the participants. In 1 hour, she can pack 24 bags. About how many can she pack in 3 hours?

$$\mathbf{20 \times 3 = 60 \text{ bags}}$$

Diagnostic Test

Estimate by rounding each mixed number to the nearest whole number.

1. $4\frac{2}{3} + 3\frac{1}{5} =$

1. about 8

2. $6\frac{2}{5} - 3\frac{3}{8} =$

2. about 3

3. $18\frac{4}{5} - 11\frac{1}{6} =$

3. about 8

4. Bruce mixes $3\frac{1}{4}$ liters of fruit juice with $4\frac{4}{5}$ liters of lemon-lime soda. About how much liquid will the bowl need to hold in order for Bruce to mix the two liquids?

4. about 8 liters

Estimate. Use rounding or compatible numbers.

5. $121 \times 19 =$

5. about 2,400

6. $637 \div 7 =$

6. about 90

7. $117 \div 6 =$

7. about 20

8. Dinah sold 9 cases of cookies for a fundraiser. Each case holds 23 boxes of cookies. About how many boxes of cookies did Dinah sell?

8. about 180 boxes

Add or subtract. Write in simplest form.

9. $\frac{1}{5} + \frac{2}{5} =$

9. $\frac{3}{5}$

10. $\frac{3}{8} + \frac{7}{8} =$

10. $1\frac{1}{4}$

11. $\frac{3}{5} + \frac{1}{3} =$

11. $\frac{14}{15}$

12. $\frac{5}{8} - \frac{1}{8} =$

12. $\frac{1}{2}$

13. $\frac{7}{9} - \frac{2}{3} =$

13. $\frac{1}{9}$

14. Hal spent $\frac{3}{4}$ hour reading on Monday and $\frac{5}{6}$ hour on Wednesday. How long did Hal spend reading in all?

14. $1\frac{7}{12}$ h

Pretest

Multiply. Write in simplest form.

1. $5 \times \frac{3}{4} =$

2. $8 \times \frac{1}{6} =$

3. $\frac{2}{5} \times \frac{3}{8} =$

4. $\frac{1}{5} \times \frac{5}{8} =$

5. $\frac{1}{4} \times \frac{1}{3} =$

6. $\frac{1}{9} \times \frac{3}{8} =$

7. $2\frac{2}{5} \times \frac{5}{9} =$

8. $3\frac{1}{8} \times \frac{4}{5} =$

1. $3\frac{3}{4}$

2. $1\frac{1}{3}$

3. $\frac{3}{20}$

4. $\frac{1}{8}$

5. $\frac{1}{12}$

6. $\frac{1}{24}$

7. $1\frac{1}{3}$

8. $2\frac{1}{2}$

Use the model to find each quotient.

9. $5 \div \frac{1}{3} =$



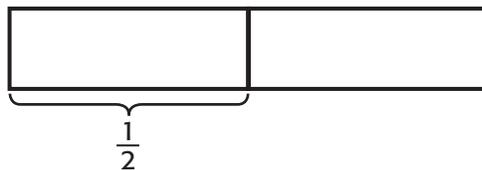
9. **15**

10. $4 \div \frac{1}{6} =$



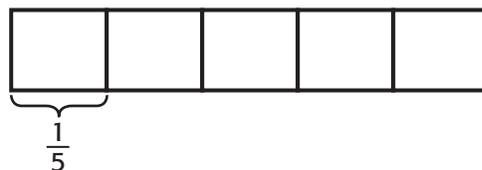
10. **24**

11. $\frac{1}{2} \div 6 =$



11. $\frac{1}{12}$

12. $\frac{1}{5} \div 2 =$



12. $\frac{1}{10}$

Check My Progress (Lessons 1 through 4)**Estimate each product. Draw a bar diagram if necessary.**

1. $\frac{1}{4} \times 19 =$

2. $\frac{1}{6} \times 55 =$

3. $13 \times \frac{1}{2} =$

4. $16 \times \frac{2}{5} =$

5. $2\frac{4}{5} \times 3\frac{1}{7} =$

1. $\frac{1}{4} \times 20 = 5$

2. $\frac{1}{6} \times 60 = 10$

3. $12 \times \frac{1}{2} = 6$

4. $15 \times \frac{2}{5} = 6$

5. $3 \times 3 = 9$

Multiply. Write in simplest form.

6. $\frac{1}{2} \times 24 =$

7. $\frac{2}{13} \times 26 =$

8. $\frac{2}{5} \times 17 =$

9. $18 \times \frac{1}{4} =$

10. $\frac{1}{15} \times 18 =$

6. 12

7. 4

8. $6\frac{4}{5}$

9. $4\frac{1}{2}$

10. $1\frac{1}{5}$

Check My Progress (Lessons 5 through 8)**Multiply. Write in simplest form.**

1. $\frac{1}{4} \times \frac{1}{9} =$

1. $\frac{1}{36}$

2. $\frac{1}{6} \times \frac{5}{8} =$

2. $\frac{5}{48}$

3. $\frac{3}{12} \times \frac{1}{2} =$

3. $\frac{1}{8}$

4. $\frac{1}{6} \times \frac{2}{5} =$

4. $\frac{1}{15}$

5. $\frac{3}{9} \times \frac{1}{7} =$

5. $\frac{1}{21}$

6. $\frac{1}{2} \times 2\frac{1}{4} =$

6. $1\frac{1}{8}$

7. $\frac{2}{13} \times 26\frac{2}{5} =$

7. $4\frac{4}{65}$

8. $\frac{2}{5} \times 17\frac{3}{4} =$

8. $7\frac{1}{10}$

9. $18\frac{3}{8} \times \frac{1}{4} =$

9. $4\frac{19}{32}$

10. $\frac{1}{12} \times 18\frac{4}{9} =$

10. $1\frac{29}{54}$

11. $4\frac{3}{8} \times 2\frac{1}{9} =$

11. $9\frac{17}{72}$

12. $6\frac{2}{3} \times 2\frac{5}{12} =$

12. $16\frac{1}{9}$

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

Multiply.

1. $4 \times \frac{3}{5} =$

A. $1\frac{2}{5}$

C. $2\frac{2}{5}$

B. $1\frac{2}{3}$

D. $2\frac{2}{3}$

1. _____ **C**

2. $\frac{2}{7} \times 9 =$

F. $2\frac{2}{9}$

H. $3\frac{1}{7}$

G. $2\frac{4}{7}$

I. $9\frac{2}{7}$

2. _____ **G**

3. $5 \times \frac{2}{3} =$

A. $3\frac{1}{3}$

C. $6\frac{1}{3}$

B. $3\frac{2}{3}$

D. $6\frac{2}{3}$

3. _____ **A**

4. $\frac{3}{4} \times \frac{1}{3} =$

F. $\frac{1}{4}$

H. $\frac{3}{5}$

G. $\frac{1}{3}$

I. $1\frac{1}{12}$

4. _____ **F**

5. $3\frac{3}{5} \times 2\frac{2}{9} =$

A. 5

C. 7

B. 6

D. 8

5. _____ **D**

6. $5\frac{5}{6} \times 4\frac{1}{2} =$

F. $20\frac{5}{6}$

H. $25\frac{1}{2}$

G. $24\frac{1}{6}$

I. $26\frac{1}{4}$

6. _____ **I**

Chapter Test, Form 1A *(continued)*

Read each question carefully. Write the letter for your answer on the line provided.

Use the models to divide.

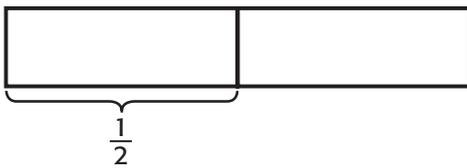
7. $3 \div \frac{1}{4} =$



- A. 12 B. 14 C. 16 D. 18

7. **A**

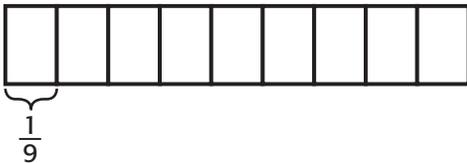
8. $\frac{1}{2} \div 3 =$



- F. $\frac{1}{2}$ G. $\frac{1}{4}$ H. $\frac{1}{6}$ I. $\frac{1}{8}$

8. **H**

9. $\frac{1}{9} \div 2 =$



- A. $\frac{1}{18}$ B. $\frac{1}{10}$ C. $\frac{1}{8}$ D. $\frac{1}{7}$

9. **A**

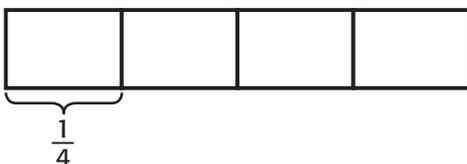
10. Mandy has 7 pounds of raisins to divide equally into $\frac{1}{2}$ pound bags. How many bags will she fill? Find the unknown in $7 \div \frac{1}{2} = r$.



- F. 9 bags G. 12 bags H. 14 bags I. 21 bags

10. **H**

11. There is $\frac{1}{4}$ of a birthday cake left over. If 3 friends share it equally, what fraction of the entire cake will each friend receive? Find the unknown in $\frac{1}{4} \div 3 = c$.



- A. $\frac{1}{6}$ B. $\frac{1}{7}$ C. $\frac{1}{12}$ D. $\frac{1}{14}$

11. **C**

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

Multiply.

1. $4 \times \frac{2}{5} =$

A. $1\frac{3}{5}$

C. $2\frac{2}{5}$

B. $1\frac{2}{3}$

D. $2\frac{2}{3}$

1. _____ **A**

2. $\frac{2}{7} \times 8 =$

F. $2\frac{2}{9}$

H. $2\frac{2}{7}$

G. $2\frac{4}{7}$

I. $9\frac{2}{7}$

2. _____ **H**

3. $5 \times \frac{2}{9} =$

A. $5\frac{2}{3}$

C. $1\frac{1}{9}$

B. $5\frac{2}{9}$

D. $1\frac{2}{9}$

3. _____ **C**

4. $\frac{3}{4} \times \frac{2}{3} =$

F. $\frac{1}{4}$

H. $\frac{3}{5}$

G. $\frac{1}{3}$

I. $\frac{1}{2}$

4. _____ **I**

5. $2\frac{3}{5} \times 1\frac{12}{13} =$

A. 5

C. 7

B. 6

D. 8

5. _____ **A**

6. $2\frac{1}{6} \times 3\frac{2}{3} =$

F. $7\frac{17}{18}$

H. 7

G. $6\frac{1}{2}$

I. $8\frac{1}{6}$

6. _____ **F**

Chapter Test, Form 1B *(continued)*

Read each question carefully. Write the letter for your answer on the line provided.

Use the models to divide.

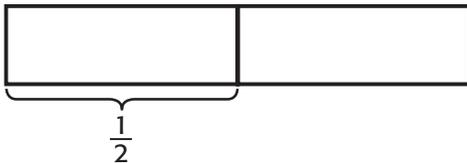
7. $3 \div \frac{1}{3} =$



- A. 8 B. 9 C. 10 D. 12

7. **B**

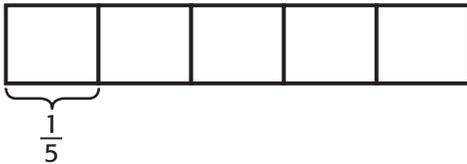
8. $\frac{1}{2} \div 6 =$



- F. $\frac{1}{12}$ G. $\frac{1}{14}$ H. $\frac{1}{16}$ I. $\frac{1}{18}$

8. **F**

9. $\frac{1}{5} \div 2 =$



- A. $\frac{1}{18}$ B. $\frac{1}{10}$ C. $\frac{1}{8}$ D. $\frac{1}{7}$

9. **B**

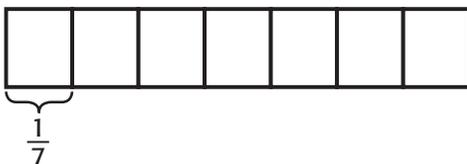
10. Amanda has 5 pounds of raisins to divide equally into $\frac{1}{4}$ pound bags. How many bags can she fill? Find the unknown in $5 \div \frac{1}{4} = r$.



- F. 9 bags G. 12 bags H. 14 bags I. 20 bags

10. **I**

11. There is $\frac{1}{7}$ of a birthday cake left over. If 4 friends share it equally, what fraction of the entire cake will each friend receive? Find the unknown in $\frac{1}{7} \div 4 = c$.



- A. $\frac{1}{28}$ B. $\frac{1}{24}$ C. $\frac{1}{14}$ D. $\frac{1}{11}$

11. **A**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

Multiply.

1. $8 \times \frac{2}{5} =$

A. $1\frac{3}{5}$

C. $3\frac{1}{5}$

B. $2\frac{4}{5}$

D. $4\frac{1}{5}$

1. _____ **C**

2. $\frac{2}{7} \times 10 =$

F. $2\frac{2}{7}$

H. $3\frac{2}{7}$

G. $2\frac{6}{7}$

I. $3\frac{6}{7}$

2. _____ **G**

3. $\frac{1}{2} \times \frac{5}{7} =$

A. $\frac{5}{9}$

C. $\frac{5}{17}$

B. $\frac{5}{14}$

D. $\frac{5}{22}$

3. _____ **B**

4. $2\frac{2}{5} \times \frac{1}{3} =$

F. $\frac{2}{5}$

H. $\frac{4}{5}$

G. $\frac{3}{5}$

I. $1\frac{1}{5}$

4. _____ **H**

5. $4\frac{4}{25} \times 1\frac{12}{13} =$

A. 5

C. 7

B. 6

D. 8

5. _____ **D****Solve.**

6. Barry has \$55. He used $\frac{2}{5}$ of his money to buy a new pair of running shoes. How much did Barry spend on his new shoes?

F. \$21

G. \$22

H. \$23

I. \$24

6. _____ **G**

7. Iris spent $2\frac{1}{2}$ hours studying last night. She spent $\frac{1}{5}$ of this time studying science. How much time did she spend studying science?

A. $\frac{1}{2}$ h

B. $\frac{1}{5}$ h

C. $\frac{2}{5}$ h

D. $\frac{3}{4}$ h

7. _____ **A**

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

Find each quotient. Use a model.

8. $7 \div \frac{1}{8} =$ 

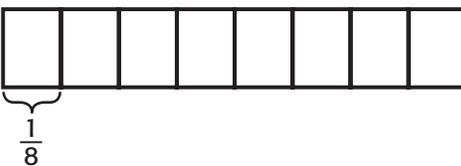
8. 56

9. $9 \div \frac{1}{3} =$ 

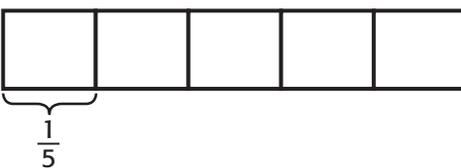
9. 27

10. $4 \div \frac{1}{6} =$ 

10. 24

11. $\frac{1}{8} \div 6 =$ 

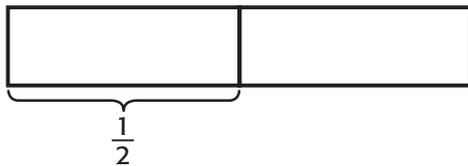
11. $\frac{1}{48}$

12. $\frac{1}{5} \div 6 =$ 

12. $\frac{1}{30}$

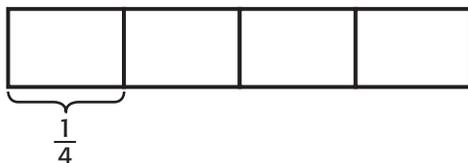
13. Marty has $\frac{1}{2}$ pound of raisins to divide equally into 10 different bags. What fraction of a pound will be in each bag?

13. $\frac{1}{20}$ pound



14. There is $\frac{1}{4}$ of a birthday cake left over. If 4 friends share it equally, what fraction of the entire cake will each friend receive?

14. $\frac{1}{16}$ cake



Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

Multiply.

1. $3 \times \frac{4}{5} =$

A. $1\frac{4}{5}$

C. $2\frac{3}{5}$

B. $2\frac{2}{5}$

D. $2\frac{4}{5}$

1. **B**

2. $\frac{2}{7} \times 14 =$

F. 2

H. 4

G. 3

I. 5

2. **H**

3. $\frac{3}{4} \times \frac{5}{9} =$

A. $\frac{5}{12}$

C. $\frac{5}{15}$

B. $\frac{5}{13}$

D. $\frac{5}{27}$

3. **A**

4. $3\frac{1}{4} \times \frac{1}{3} =$

F. $1\frac{3}{12}$

H. $1\frac{1}{13}$

G. $1\frac{1}{12}$

I. $1\frac{1}{15}$

4. **G**

5. $3\frac{3}{11} \times 1\frac{5}{6} =$

A. 5

C. 7

B. 6

D. 8

5. **B** **Solve.**

6. Wally has \$84. He used $\frac{2}{7}$ of his money to buy a new pair of running shoes. How much did Wally spend on his new shoes?

F. \$12

G. \$18

H. \$24

I. \$48

6. **H**

7. Tina spent $3\frac{1}{4}$ hours studying last night. She spent $\frac{1}{3}$ of the time studying language arts. How much time did she spend studying language arts?

A. $1\frac{1}{12}$ h

B. $1\frac{1}{5}$ h

C. $1\frac{2}{3}$ h

D. $1\frac{3}{4}$ h

7. **A**

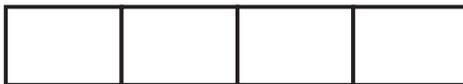
Chapter Test, Form 2B *(continued)*

Read each question carefully. Write your answer on the line provided.

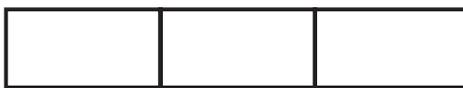
Find each quotient. Use a model.

8. $8 \div \frac{1}{3} =$ 

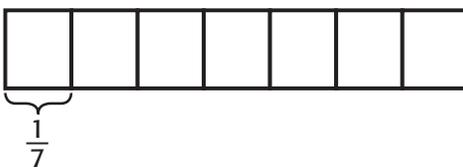
8. 24

9. $4 \div \frac{1}{9} =$ 

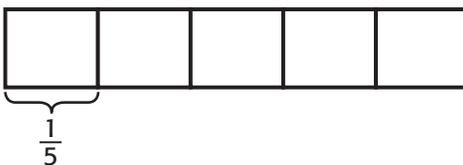
9. 36

10. $3 \div \frac{1}{11} =$ 

10. 33

11. $\frac{1}{7} \div 6 =$ 

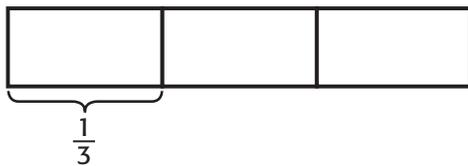
11. $\frac{1}{42}$

12. $\frac{1}{5} \div 5 =$ 

12. $\frac{1}{25}$

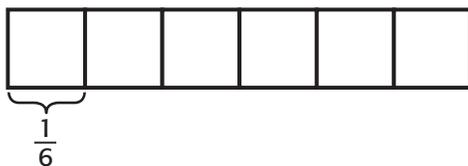
13. Marty has $\frac{1}{3}$ pound of raisins to divide equally into 6 different bags. What fraction of a pound will be in each bag?

13. $\frac{1}{18}$ pound



14. There is $\frac{1}{6}$ of a birthday cake left over. If 3 friends share it equally, what fraction of the entire cake will each friend receive?

14. $\frac{1}{18}$ cake



Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Multiply.

1. $4 \times \frac{3}{4} =$

1. $\underline{\quad 3 \quad}$

2. $\frac{2}{7} \times 15 =$

2. $\underline{\quad 4\frac{2}{7} \quad}$

3. $6 \times \frac{2}{11} =$

3. $\underline{\quad 1\frac{1}{11} \quad}$

4. $\frac{4}{5} \times \frac{4}{9} =$

4. $\underline{\quad \frac{16}{45} \quad}$

5. $\frac{3}{4} \times \frac{5}{11} =$

5. $\underline{\quad \frac{15}{44} \quad}$

6. $5\frac{1}{2} \times \frac{7}{9} =$

6. $\underline{\quad 4\frac{5}{18} \quad}$

7. $3\frac{2}{9} \times 1\frac{5}{7} =$

7. $\underline{\quad 5\frac{11}{21} \quad}$

8. $1\frac{2}{3} \times 3\frac{3}{5} =$

8. $\underline{\quad 6 \quad}$

Solve.9. Jay has \$80. He used $\frac{2}{5}$ of his money to buy a new pair of running shoes. How much did Jay spend on his new shoes?

9. $\underline{\quad \$32 \quad}$

10. Marcie spent $3\frac{3}{5}$ hours studying last night. She spent $\frac{1}{4}$ of the time studying history. How much time did she spend studying history?

10. $\underline{\quad \frac{9}{10} \text{ h} \quad}$

Chapter Test, Form 3A (continued)**Divide. Draw a model if necessary.**

11. $8 \div \frac{1}{9} =$

11. 72

12. $7 \div \frac{1}{8} =$

12. 56

13. $9 \div \frac{1}{3} =$

13. 27

14. $\frac{1}{4} \div 6 =$

14. $\frac{1}{24}$

15. $6 \div \frac{1}{5} =$

15. 30

16. $\frac{1}{5} \div 3 =$

16. $\frac{1}{15}$

17. $7 \div \frac{1}{7} =$

17. 49

18. $\frac{1}{2} \div 3 =$

18. $\frac{1}{6}$

Solve.

19. Willow has a board that is 10 feet long. She needs to cut the board into equal pieces that are $\frac{1}{3}$ feet long. How many pieces can she cut?

19. 30 pieces

20. Neil bought 2 pounds of beef. He wants to make hamburger patties that weigh $\frac{1}{4}$ pound each. How many patties can Neil make?

20. 8 patties

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Multiply.

1. $6 \times \frac{2}{3} =$

1. $\underline{\quad 4 \quad}$

2. $\frac{2}{9} \times 20 =$

2. $\underline{\quad 4\frac{4}{9} \quad}$

3. $6 \times \frac{5}{13} =$

3. $\underline{\quad 2\frac{4}{13} \quad}$

4. $\frac{5}{7} \times \frac{4}{9} =$

4. $\underline{\quad \frac{20}{63} \quad}$

5. $\frac{1}{4} \times \frac{5}{12} =$

5. $\underline{\quad \frac{5}{48} \quad}$

6. $7\frac{1}{9} \times \frac{3}{4} =$

6. $\underline{\quad 5\frac{1}{3} \quad}$

7. $5\frac{1}{8} \times 2\frac{2}{3} =$

7. $\underline{\quad 13\frac{2}{3} \quad}$

8. $2\frac{1}{5} \times 4\frac{2}{7} =$

8. $\underline{\quad 9\frac{3}{7} \quad}$

Solve.

9. Pietro has \$75. He used $\frac{3}{5}$ of his money to buy a new pair of running shoes. How much did Pietro spend on his new shoes?

9. $\underline{\quad \$45 \quad}$

10. Wanda spent $4\frac{1}{8}$ hours studying last night. She spent $\frac{1}{3}$ of the time studying math. How much time did she spend studying math?

10. $\underline{\quad 1\frac{3}{8} \text{ h} \quad}$

Chapter Test, Form 3B (continued)**Divide. Draw a model if necessary.**

11. $10 \div \frac{1}{6} =$

11. **60**

12. $6 \div \frac{1}{9} =$

12. **54**

13. $\frac{1}{8} \div 3 =$

13. **$\frac{1}{24}$**

14. $\frac{1}{4} \div 2 =$

14. **$\frac{1}{8}$**

15. $5 \div \frac{1}{5} =$

15. **25**

16. $\frac{1}{2} \div 3 =$

16. **$\frac{1}{6}$**

17. $9 \div \frac{1}{9} =$

17. **81**

18. $\frac{1}{4} \div 12 =$

18. **$\frac{1}{48}$**

Solve.

19. Ross has a board that is 12 feet long. He needs to cut the board into equal pieces that are $\frac{1}{2}$ feet long. How many pieces can he cut?

19. **24 pieces**

20. Tori bought 6 pounds of sugar. She wants to divide the sugar in bags that weigh $\frac{1}{5}$ pound each. How many bags of sugar will Tori make?

20. **30 bags**

Standardized Test Practice

Read each question carefully. Fill in the correct answer.

1. Evaluate the expression if $c = 4$ and $d = 5$.

$$3c \div (d - 1) =$$

- A 3
- B 4
- C 5
- D 6

2. Find the prime factorization of 88.

- F 8×11
- G $2 \times 4 \times 11$
- H $2 \times 2 \times 2 \times 2 \times 11$
- J $2 \times 2 \times 2 \times 11$

3. Multiply 23.05×3.2 .

- A 75.2
- B 73.76
- C 73.6
- D 69

4. Multiply $\frac{4}{7} \times \frac{2}{3}$.

- A $\frac{8}{21}$
- B $\frac{6}{7}$
- C $\frac{21}{8}$
- D $1\frac{1}{7}$

5. Judy went shopping for school supplies. She bought a binder for \$1.38, a pack of pencils for \$2.05, and a box of erasers for \$3.88. She paid with a \$10-bill. How much change did Judy receive?



- A \$6.57
- B \$4.07
- C \$3.69
- D \$2.69

6. The length of one ribbon measures $17\frac{1}{2}$ inches. The length of the other ribbon measures $24\frac{3}{4}$ inches, how many inches in length are the ribbons if they are placed end to end?



- A $42\frac{1}{4}$ inches
- B $42\frac{1}{2}$ inches
- C $41\frac{1}{4}$ inches
- D $41\frac{1}{2}$ inches

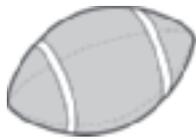
Standardized Test Practice *(continued)*

7. For every car Ming washes, she earns 3 dollars. Use the table to find how much Ming will earn after washing 15 cars.

Number of Cars Washed	1	2	3	4	5
Amount Earned (\$)	3	6	9	12	15

- (A) \$30 (C) \$60
 (B) \$45 (D) \$75

8. Ronen spent \$128 on 16 tickets to the high school football game. Determine the price of each ticket.



- (F) \$5 (H) \$7
 (G) \$6 (J) \$8

9. Tristan rode his bike $3\frac{2}{3}$ miles on Saturday. He rode $1\frac{4}{5}$ miles on Sunday. How many more miles did he ride on Saturday than on Sunday?



- (A) $\frac{13}{15}$ mile
 (B) $1\frac{3}{5}$ miles
 (C) $1\frac{13}{15}$ miles
 (D) $2\frac{13}{15}$

10. Jacqui has 40 post cards to place in her scrapbook. She can place 6 post cards on each page. How many pages will she need to place all her post cards?



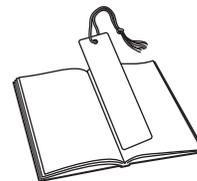
- (F) 6 pages (H) 8 pages
 (G) 7 pages (I) 9 pages

11. Replace x with a number so the fractions are equivalent.

$$\frac{9}{10} = \frac{36}{x}$$

- (A) 4 (C) 30
 (B) 14 (D) 40

12. Candi has 42 books. She gives half of the books to the library and then gives some to her sister. She keeps 14 for herself. Which expression shows how to find the number of books Candi gave to her sister?



- (F) $(42 - 14) \div 2 = s$
 (G) $42 \div 14 - 2 = s$
 (H) $(42 \div 2) - 14 = s$
 (I) $42 - 14 - 2 = s$



Chapter Assessment Answer Key

Extended-Response Test, Page 258 Sample Answers

In addition to the scoring rubric found on page 259, the following sample answers may be used as guidance in evaluating open-ended assessment items.

1. a. $\frac{8}{45}$; I multiplied $\frac{2}{9}$ by $\frac{4}{5}$.

b. $\frac{1}{10}$; I multiplied $\frac{1}{8}$ by $\frac{4}{5}$.

c. $\frac{5}{18}$; First, I found the sum of $\frac{2}{9}$ and $\frac{1}{8}$, which is $\frac{25}{72}$. Then, I multiplied $\frac{25}{72}$ by $\frac{4}{5}$.

2. 20 days; I divided 4 by $\frac{1}{5}$.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

A recipe for one loaf of bread requires $1\frac{4}{5}$ teaspoons of yeast.

1. Use mental math to estimate about how much yeast is needed to make 9 loaves of bread.

about 18 teaspoons

2. Explain how you got your estimate.

Sample answer: I rounded $1\frac{4}{5}$ to 2 and

multiplied 2 by 9. $2 \times 9 = 18$.

3. Is your estimate less than or greater than the exact answer?

greater than

4. How many teaspoons of yeast are needed to make 9 loaves of bread? Explain how you found your answer.

$16\frac{1}{5}$ teaspoons; Sample answer: I changed

$1\frac{4}{5}$ to an improper fraction and then multiplied

the improper fraction by 9. $1\frac{4}{5} \times 9 = \frac{9}{5} \times 9$

$= \frac{81}{5}$ or $16\frac{1}{5}$.

5. Use mental math to estimate the product of $3\frac{1}{3}$ and $1\frac{3}{4}$.

about 6

6. Explain how you got your estimate.

Sample answer: I rounded both mixed

numbers to their nearest whole numbers and

then multiplied the whole numbers.

$3\frac{1}{3} \times 1\frac{3}{4} = 3 \times 2 = 6$.

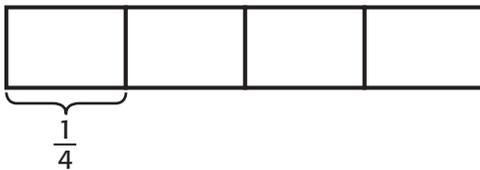
Oral Assessment *(continued)*

7. Find $3\frac{1}{3} \times 1\frac{3}{4}$. Explain how you found your answer.

$5\frac{5}{6}$; Sample answer: I changed both mixed numbers to improper fractions and then multiplied the improper fractions.

$$3\frac{1}{3} \times 1\frac{3}{4} = \frac{10}{3} \times \frac{7}{4} = \frac{35}{6} \text{ or } 5\frac{5}{6}$$

8. Find $\frac{1}{4} \div 3$. Use the model to show how you found your answer.



$\frac{1}{12}$; See students' work.

9. Find $4 \div \frac{1}{3}$. Use the model to show how you found your answer.



12; See students' work.

Ainsley has a bag of candy that weighs 2 pounds. She wants to give each of her friends an equal amount. If each friend receives $\frac{1}{5}$ pound of candy, how many friends does Ainsley give candy?

10. Write a math sentence to represent the situation.

$$2 \div \frac{1}{5} = x.$$

11. Use the model to show how you would solve the problem.



See students' work.

12. Solve the problem.

10 friends

Am I Ready?

Practice

Multiply.

1. $13 \times 6 = \underline{\mathbf{78}}$

2. $25 \times 3 = \underline{\mathbf{75}}$

3. $19 \times 12 = \underline{\mathbf{228}}$

4. $86 \times 100 = \underline{\mathbf{8,600}}$

5. $15 \times 100 = \underline{\mathbf{1,500}}$

6. $7 \times 1,000 = \underline{\mathbf{7,000}}$

7. A concert was sold out for 7 straight shows. If 10,000 tickets were sold at each performance, how many tickets were sold in all?

70,000 tickets

Divide.

8. $36 \div 12 = \underline{\mathbf{3}}$

9. $32 \div 4 = \underline{\mathbf{8}}$

10. $126 \div 14 = \underline{\mathbf{9}}$

11. $600 \div 100 = \underline{\mathbf{6}}$

12. $270 \div 10 = \underline{\mathbf{27}}$

13. $5,800 \div 100 = \underline{\mathbf{58}}$

14. A strip of ribbon is 144 inches long. How many 12-inch pieces of ribbon can be made from the strip of ribbon?

12 pieces

Am I Ready?

Review

Multiplication

Key Concepts

- Multiply the ones first. Then multiply the tens.

$$\begin{array}{r} 1 \\ 26 \\ \times 3 \\ \hline 8 \end{array} \qquad \begin{array}{r} 1 \\ 26 \\ \times 3 \\ \hline 78 \end{array}$$

- To multiply by 10, place one 0 on the end.

$$96 \times 10 = 960$$

- To multiply by 100, place two 0s on the end.

$$96 \times 100 = 9,600$$

- To multiply by 1,000, place three 0s on the end.

$$96 \times 1,000 = 96,000$$

Multiply.

1. $12 \times 3 = \underline{\quad 36 \quad}$

2. $46 \times 2 = \underline{\quad 92 \quad}$

3. $15 \times 12 = \underline{\quad 180 \quad}$

4. $14 \times 11 = \underline{\quad 154 \quad}$

5. $4 \times 100 = \underline{\quad 400 \quad}$

6. $8 \times 1,000 = \underline{\quad 8,000 \quad}$

7. $53 \times 10 = \underline{\quad 530 \quad}$

8. $718 \times 100 = \underline{\quad 71,800 \quad}$

9. $65 \times 100 = \underline{\quad 6,500 \quad}$

10. $3 \times 1,000 = \underline{\quad 3,000 \quad}$

Am I Ready?

Apply

Solve.

1. Sonia has 48 crayons that belong in 2 boxes. She puts the same number of crayons in each box. How many crayons are in each box?

24 crayons

2. Hagos puts pictures of his friends in a photo album. The album has 16 pages that hold 6 pictures each. How many pictures can Hagos put in the photo album?

96 pictures

3. Tanisha has 300 feet of ribbon paper to make decorations for a school pep rally. She cuts the ribbon paper into strips of 25 feet each. How many strips of ribbon paper does she cut?

12 strips

4. Kobla and each of his 4 friends have 1,000 pennies. How many pennies do they have altogether?

5,000 pennies

5. Martin buys 42 packages of paper to sell in his store. Each package has 100 sheets of paper. How many sheets of paper did Martin buy?

4,200 sheets

6. Rosalinda made 24 sandwiches for a picnic. There were 12 people at the picnic. All of the sandwiches were eaten. If each person ate the same number of sandwiches, how many sandwiches did each person have?

2 sandwiches

7. Giselle needed 3 pieces of fabric for a skirt she was making. Each piece was $2\frac{1}{2}$ feet long. How much fabric did she need in all?

$7\frac{1}{2}$ feet

8. Lily was helping her dad make a tree house. They cut a 5 ft board into 4 equal sections. How long was each section?

$1\frac{1}{4}$ ft

Diagnostic Test

Multiply.

1. $19 \times 5 =$

2. $45 \times 7 =$

3. $1,533 \times 3 =$

1. 95

2. 315

4. $16 \times 12 =$

5. $13 \times 9 =$

6. $7,008 \times 3 =$

3. 4,599

4. 192

7. The theater was sold out for five straight nights. If 1,850 tickets were sold each night, how many tickets were sold in all?

5. 117

6. 21,024

7. 9,250 tickets

Divide.

8. $63 \div 7 =$

8. 9

9. $82 \div 41 =$

9. 2

10. $72 \div 3 =$

10. 24

11. $54 \div 2 =$

11. 27

12. $110 \div 10 =$

12. 11

13. $2,900 \div 100 =$

13. 29

14. Mr. Johnson has a box containing 240 juice boxes. How many six-packs can he make from this box?

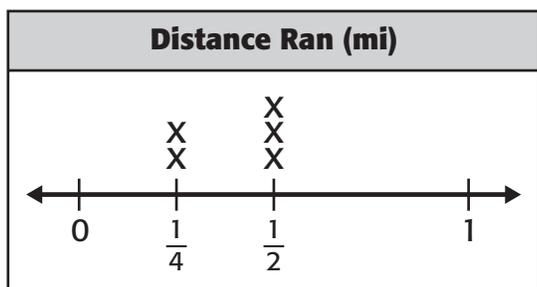
14. 40 six-packs

Pretest

Complete.

1. 9 ft = in.
2. 3 mi = ft
3. 288 in. = yd
4. 144 oz = lb
5. 3 T = lb
6. 12 lb = oz
7. 40 m = cm
8. 950 mm = cm
9. 3,000 m = km
10. 5 cm = mm
11. 17 kg = g
12. 12,000 g = kg
13. 7 L = mL
14. 1 gal = pt

15. Find the fair share using the following line plot.



Use any strategy to solve each problem.

16. On her way home from school, Palama walked 5 blocks west to the grocery store, 2 blocks south to visit her aunt, then 5 blocks north to go home. What direction is her home from school?
17. A tree is 2 meters tall. The living room ceiling is 2,100 millimeters tall. Will the tree fit in the living room?

1. 108
2. 15,840
3. 8
4. 9
5. 6,000
6. 192
7. 4,000
8. 95
9. 3
10. 50
11. 17,000
12. 12
13. 7,000
14. 8
15. $\frac{2}{5}$ mile

Check My Progress *(Lessons 1 through 5)*

Read each question carefully. Write your answer on the line provided.

Complete.

1. 30 in. = _____ ft

1. $2\frac{1}{2}$

2. 180 in. = _____ yd

2. **5**

3. 384 in. = _____ ft

3. **32**

4. 54 ft = _____ yd

4. **18**

5. 9 lb = _____ oz

5. **144**

6. 8,000 lb = _____ T

6. **4**

7. 480 oz = _____ lb

7. **30**

8. 15 T = _____ lb

8. **30,000**

Solve each problem by using logical reasoning.

9. Jasmine has 5 books that she wants to read. She wants to read the nonfiction book first and the mystery book last. In how many different orders can she read the books?

9. **6 different orders**

10. On a camping trip, Vinnie hiked 3 miles south from his campsite to a lake. Then he hiked 4 miles west to the picnic area and 3 miles north to the observation deck. If he wants to hike back to his campsite, in which direction should Vinnie hike?

10. **east**

Check My Progress (Lessons 6 through 10)

Read each question carefully. Write your answer on the line provided.

Complete.

1. 9 c = _____ fl oz

1. 72

2. 32 qt. = _____ gal

2. 8

3. 30 pt. = _____ c

3. 60

4. 4 gal = _____ qt

4. 16

5. 384 fl oz = _____ qt

5. 12

6. 8 pt = _____ fl oz

6. 128

7. 50 m = _____ cm

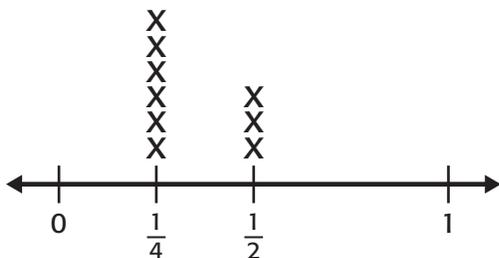
7. 5,000

8. 2,000 m = _____ km

8. 2

9. Complete the line plot of the measurements in the table. Then find the fair share.

Amount of Apples (lb)								
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$



What is the fair share of apples, in pounds?

9. $\frac{1}{3}$ pound

Vocabulary Test

Fill in the circle next to the best answer.

- The capacity of a container is which of the following?
 - the elapsed time
 - the customary unit
 - the metric unit
 - the amount that it can hold
- When you convert from feet to inches, you are doing which of the following?
 - changing the measurement unit
 - determining capacity
 - determining length
 - changing width
- Customary units are measured in which of the following?
 - meters and centimeters only
 - inches, feet, yards, and miles
 - minutes and hours
 - days and weeks
- When the students calculated the fair share, they found which of the following?
 - a measure for how heavy an object is
 - a customary unit of capacity
 - the distance between two points
 - an amount divided equally
- Length is best described as which of the following?
 - measurement from side to side
 - distance measured between bottom and top
 - distance measured between two points
 - volume
- When finding the mass of an object, you determine which of the following?
 - the quantity of matter in the object
 - its weight
 - its height
 - its length
- The metric system is based on which of the following?
 - volume
 - decimals
 - height, weight, and length
 - inches, feet, and yards
- The weight of an object is determined by which of the following?
 - gravity
 - volume
 - height
 - none of the above

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the most reasonable unit for measuring the height of a flagpole?

- A. inch
 B. foot
 C. gallon
 D. mile

1. **B**

Which value completes each sentence?

2. 125 ft = _____ yd _____ ft

- F. 42 yd 1 ft
 G. 41 yd 2 ft
 H. 41 yd 1 ft
 I. 40 yd 2 ft

2. **G**

3. 59 in. = _____ ft _____ in.

- A. 4 ft
 B. 4 ft 9 in.
 C. 4 ft 11 in.
 D. 5 ft

3. **C**

4. 67 oz = _____ lb _____ oz

- F. 3 lb 13 oz
 G. 3 lb 3 oz
 H. 4 lb 13 oz
 I. 4 lb 3 oz

4. **I**

5. 46 fl oz = _____ c _____ fl oz

- A. 6 c 6 fl oz
 B. 6 c 4 fl oz
 C. 5 c 6 fl oz
 D. 5 c 4 fl oz

5. **C**

6. $1\frac{1}{2}$ T = _____ lb

- F. 3,500 lb
 G. 3,000 lb
 H. 2,750 lb
 I. 2,500 lb

6. **G**

Chapter Test, Form 1A *(continued)*

Which value completes each sentence?

7. 75 km = _____ m

- A. 75,000 m
- B. 7,500 m
- C. 750 m
- D. 75 m

7. **A**

8. 32,000 mL = _____ L

- F. 0.032 L
- G. 0.32 L
- H. 3.2 L
- I. 32 L

8. **I**

9. 18 kg = _____ g

- A. 18,000 g
- B. 1,800 g
- C. 180 g
- D. 1.8 g

9. **A**

10. 2 pt = _____ qt

- F. 4 qt
- G. 1 qt
- H. 2 qt
- I. 10 qt

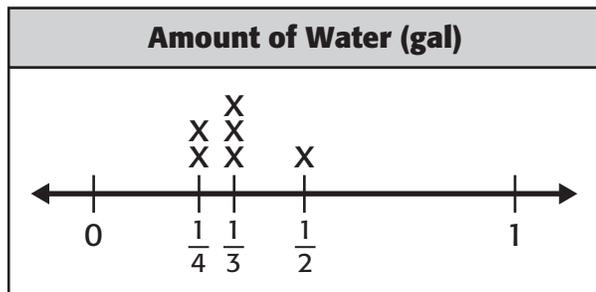
10. **G**

11. 64 fl oz = _____ c

- A. 32 c
- B. 16 c
- C. 4 c
- D. 8 c

11. **D**

12. Use the line plot to find the fair share.



- F. $\frac{1}{3}$ gallon
- G. $\frac{3}{2}$ gallon
- H. $\frac{2}{3}$ gallon
- I. $\frac{1}{4}$ gallon

12. **F**

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided.

1. Which is the most reasonable unit for measuring the thickness of a book?

A. inch
B. foot
C. gallon
D. mile

1. **A**

Which value completes each sentence?

2. 122 ft = _____ yd _____ ft

F. 42 yd 1 ft
G. 41 yd 2 ft
H. 41 yd 1 ft
I. 40 yd 2 ft

2. **I**

3. 57 in. = _____ ft _____ in.

A. 4 ft
B. 4 ft 9 in.
C. 4 ft 11 in.
D. 5 ft

3. **B**

4. 77 oz = _____ lb _____ oz

F. 3 lb 13 oz
G. 3 lb 3 oz
H. 4 lb 13 oz
I. 4 lb 3 oz

4. **H**

5. 44 fl oz = _____ c _____ fl oz

A. 6 c 6 fl oz
B. 6 c 4 fl oz
C. 5 c 6 fl oz
D. 5 c 4 fl oz

5. **D**

6. $1\frac{1}{4}$ T = _____ lb

F. 3,500 lb
G. 3,000 lb
H. 2,750 lb
I. 2,500 lb

6. **I**

Chapter Test, Form 1B *(continued)*

Which value completes each sentence?

7. 35 km = _____ m

- A. 35,000 m C. 450 m
 B. 3,500 m D. 35 m

7. **A**

8. 32,000 mL = _____ L

- F. 0.032 L H. 3.2 L
 G. 0.32 L I. 32 L

8. **I**

9. 18 kg = _____ g

- A. 18,000 g C. 180 g
 B. 1,800 g D. 1.8 g

9. **A**

10. 4 pt = _____ qt

- F. 4 qt H. 2 qt
 G. 1 qt I. 10 qt

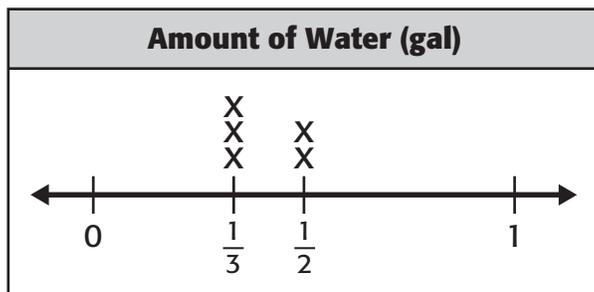
10. **H**

11. 32 fl oz = _____ c

- A. 32 c C. 4 c
 B. 16 c D. 8 c

11. **C**

12. Use the line plot to find the fair share.



- F. $\frac{3}{4}$ gallon H. $\frac{1}{2}$ gallon
 G. $\frac{2}{3}$ gallon I. $\frac{2}{5}$ gallon

12. **I**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

Which value completes each sentence?

- | | | | |
|-----------------------------------|----------------|----------------|-------------------------|
| 1. 145 ft = _____ yd _____ ft | A. 46 yd 1 ft | C. 48 yd 1 ft | 1. _____ C _____ |
| | B. 48 yd 2 ft | D. 50 yd 2 ft | |
| 2. 67 in. = _____ ft _____ in. | F. 5 ft 7 in. | H. 5 ft 11 in. | 2. _____ F _____ |
| | G. 5 ft 9 in. | I. 6 ft | |
| 3. $3\frac{1}{2}$ T = _____ lb | A. 3,500 lb | C. 6,500 lb | 3. _____ D _____ |
| | B. 6,000 lb | D. 7,000 lb | |
| 4. 66 fl oz = _____ c _____ fl oz | F. 8 c 2 fl oz | H. 6 c 6 fl oz | 4. _____ F _____ |
| | G. 8 c 3 fl oz | I. 6 c 4 fl oz | |
| 5. 38 oz = _____ lb _____ oz | A. 2 lb 1 oz | C. 2 lb 6 oz | 5. _____ C _____ |
| | B. 2 lb 3 oz | D. 3 lb 8 oz | |
| 6. 5 km = _____ m | F. 50,000 m | H. 500 m | 6. _____ G _____ |
| | G. 5,000 m | I. 50 m | |
| 7. 45 L = _____ mL | A. 450,000 mL | C. 4,500 mL | 7. _____ B _____ |
| | B. 45,000 mL | D. 450 mL | |

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

8. 75,000 g = _____ kg

F. 7,500 kg

G. 750 kg

H. 75 kg

I. 7.5 kg

8. **H**

9. 12,000 mm = _____ cm

A. 120,000 cm

B. 12 cm

C. 120 cm

D. 1,200 cm

9. **D**

10. 1 gal = _____ pt

F. 32 pt

G. 4 pt

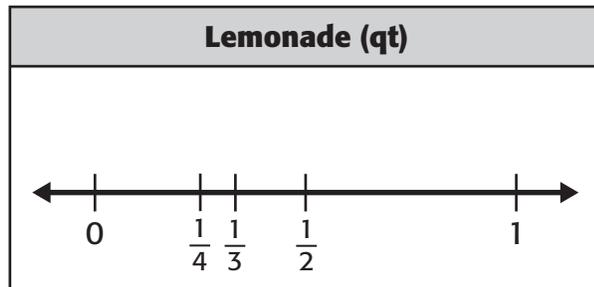
H. 16 pt

I. 8 pt

10. **I**

11. Use the measurements in the table to fill in the line plot. Then find the fair share.

Amount of Lemonade (qt)					
$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{3}$



11. **See students' work; $\frac{1}{3}$ quart**

Solve.

12. Lana and Kristy measured the length between their desks. They found that the desks were 6 feet apart. How many inches apart are Lana and Kristy's desks?

12. **72 in.**

13. For a party, Mr. and Mrs. Rodriguez made $4\frac{1}{2}$ gallons of fruit punch. How many quarts of punch did they make?

13. **18 qt**

14. Alvin ran a 5-kilometer race. When he was halfway to the finish line, how many meters did he have left to run?

14. **2,500 m**

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided.

Which value completes each sentence?

1. 139 ft = _____ yd _____ ft

A. 46 yd 1 ft

B. 48 yd 2 ft

C. 48 yd 1 ft

D. 50 yd 2 ft

1. **A**

2. 69 in. = _____ ft _____ in.

F. 5 ft 7 in.

G. 5 ft 9 in.

H. 5 ft 11 in.

I. 6 ft

2. **G**

3. $3\frac{1}{4}$ T = _____ lb

A. 3,500 lb

B. 6,000 lb

C. 6,500 lb

D. 7,000 lb

3. **C**

4. 54 fl oz = _____ c _____ fl oz

F. 8 c 2 fl oz

G. 8 c 3 fl oz

H. 6 c 6 fl oz

I. 6 c 4 fl oz

4. **H**

5. 56 oz = _____ lb _____ oz

A. 2 lb 1 oz

B. 2 lb 3 oz

C. 2 lb 6 oz

D. 3 lb 8 oz

5. **D**

6. 5 km = _____ m

F. 50,000 m

G. 5,000 m

H. 500 m

I. 50 m

6. **G**

7. 450 L = _____ mL

A. 450,000 mL

B. 45,000 mL

C. 4,500 mL

D. 450 mL

7. **A**

Chapter Test, Form 3A

Read each question carefully. Write your answer on the line provided.

Complete.

1. 28 ft = _____ yd _____ ft

1. **9 yd 1 ft**

2. 68 in. = _____ ft _____ in.

2. **5 ft 8 in.**

3. 30 oz = _____ lb _____ oz

3. **1 lb 14 oz**

4. $2\frac{1}{2}$ T = _____ lb

4. **5,000 lb**

5. 97 fl oz = _____ c _____ fl oz

5. **12 c 1 fl oz**

Solve.

6. Wally and Sharon are seeing who can throw a baseball farther. Wally threw the ball 35 yards, and Sharon threw the ball 123 feet. Who threw the baseball farther?

6. **Sharon**

7. For a meeting, Mr. and Mrs. Gonzalez made $3\frac{1}{2}$ gallons of coffee. How many quarts of coffee did they make?

7. **14 qt**

8. Elliott threw a disc 35 feet and 10 inches. How many inches total did he throw the disc?

8. **430 in.**

9. Bailey and Edna bought a puppy that weighed 12 pounds and 9 ounces. How many ounces total did the puppy weigh?

9. **201 oz**

Complete.

10. 5 g = _____ mg

10. **5,000 mg**

11. 4 m = _____ mm

11. **4,000 mm**

Chapter Test, Form 3A *(continued)*

12. 28 L = _____ mL

12. 28,000 mL

13. 68 g = _____ mg

13. 68,000 mg

14. 95,000 m = _____ km

14. 95 km

Solve.

15. Cady's book has a mass of 800 grams. What is that mass in milligrams?

15. 800,000 mg

16. Howie wants to measure the distance between Seattle, Washington, and Baltimore, Maryland. Which metric unit should he use?

16. kilometer

Complete.

17. 47 cm = _____ mm

17. 470 mm

18. 32 qt = _____ gal

18. 8 gal

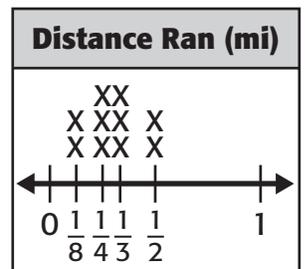
19. 62 c = _____ pt

19. 31 pt

20. Make a line plot of the measurements in the table. Then find the fair share.

Distance Ran (mi)									
$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{4}$

Fair Share _____



20. See students' work; $\frac{3}{10}$ mile

Chapter Test, Form 3B

Read each question carefully. Write your answer on the line provided.

Complete.

1. 52 ft = _____ yd _____ ft

1. 17 yd 1 ft

2. 78 in. = _____ ft _____ in.

2. 6 ft 6 in.

3. 41 oz = _____ lb _____ oz

3. 2 lb 9 oz

4. $4\frac{3}{4}$ T = _____ lb

4. 9,500 lb

5. 76 fl oz = _____ c _____ fl oz

5. 9 c 4 fl oz

Solve.

6. Beau and Liz are seeing who can throw a football farther. Beau threw the ball 27 yards, and Liz threw the ball 74 feet. Who threw the football farther?

6. Beau

7. For a party, Mr. and Mrs. Ramirez made 3 gallons of juice. How many quarts of juice did they make?

7. 12 qt

8. Samuel threw a disc 32 feet and 9 inches. How many inches total did he throw the disc?

8. 393 in.

9. Clark and Marlena bought a kitten that weighed 2 pounds and 11 ounces. How many total ounces did the kitten weigh?

9. 43 oz

Complete.

10. 61 g = _____ mg

10. 61,000 mg

11. 35,000 m = _____ km

11. 35 km

Chapter Test, Form 3B *(continued)*

12. 57 L = _____ mL

13. 114,000 mL = _____ L

14. 15,000 m = _____ km

12. 57,000 mL

13. 114 L

14. 15 km

Solve.

15. Lewis's book has a mass of 1 kilogram. What is that mass in grams?

15. 1,000 g

16. Karissa wants to measure the width of her book. Which metric unit should she use?

16. centimeter

Complete.

17. 230 cm = _____ mm

17. 2,300 mm

18. 64 qt = _____ gal

18. 16 gal

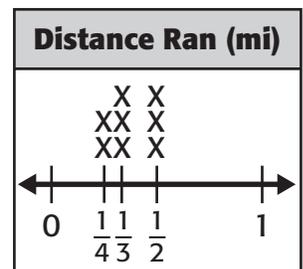
19. 52 c = _____ pt

19. 26 pt

20. Make a line plot of the measurements in the table. Then find the fair share.

Distance Ran (mi)							
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$

Fair Share _____



See students' work; $\frac{3}{8}$ mile

20. _____

Standardized Test Practice

Read each question. Fill in the correct answer.

1. Dalia is allowed to download 2 new songs each week. Use the table to find how many songs she will have downloaded by the end of Week 5.

Input	1	2	3	4	5
Output	2	4	6	8	■

- (A) 8 (C) 12
 10 (D) 20

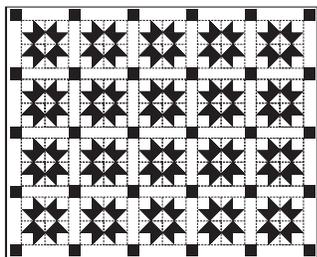
4. Jeb practices basketball 1.4 hours on Monday. On Wednesday, he practices for 3.25 hours. How much longer did Jeb practice on Wednesday than on Monday?

- (F) 1.4 hours
 1.85 hours
 (H) 3.25 hours
 (I) 4.65 hours



2. Bridget is making a quilt. She buys $5\frac{1}{3}$ yards of fabric from the craft store. How many feet of fabric is that?

- (F) 14 feet
 (G) 15 feet
 16 feet
 (I) 17 feet



3. Stanley has a collection of 891 baseball cards that he wants to put into a binder. Each page of his binder holds 9 cards. How many pages does Stanley need in order to put all of his cards in the binder?

- (A) 100 pages
 99 pages
 (C) 89 pages
 (D) 80 pages



5. Stu is purchasing paint for an art project. He buys 2 pints of purple paint, 2 pints of yellow paint, 3 pints of orange paint, and $1\frac{1}{2}$ pints of blue paint. How many cups of paint did he buy altogether?

- (A) 9 cups
 (B) $8\frac{1}{2}$ cups
 (C) $10\frac{1}{2}$ cups
 17 cups



6. The width of Nora's backyard is 12 yards. What is the width of Nora's backyard in feet?

- (F) 4 feet
 (G) 12 feet
 (H) 24 feet
 36 feet

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Standardized Test Practice *(continued)*

7. Use the measurements in the table to find the fair share.

Nail Length (in)							
$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{2}$

- (A) $\frac{1}{2}$ (C) $\frac{1}{4}$
 (B) $\frac{2}{3}$ $\frac{3}{8}$

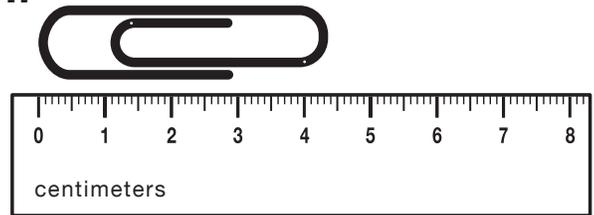
10. Willard drove 5,280 feet from his house to his aunt's house. How many miles did he drive?

- 1 mile
 (G) 2 miles
 (H) 3 miles
 (I) 4 miles

8. Arianna is weighing a cake that she made for her brother's birthday. Which is the most reasonable estimate for the weight of a cake?

- 1 pound
 (G) 1 ton
 (H) 1 ounce
 (I) 1 pint

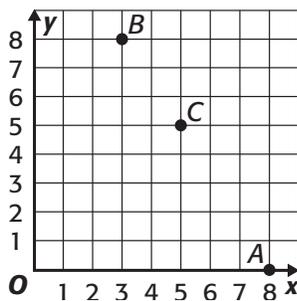
- 11.



What is the length, in centimeters, of the paper clip shown above?

- (A) 4 cm (C) 5 cm
 $4\frac{1}{2}$ cm (D) $5\frac{1}{2}$ cm

Use the coordinate graph for Exercise 9.



9. Which point has the coordinates (5, 5)?

- (A) Point A Point C
 (B) Point B (D) None of these

12. Michael is building a birdhouse. He needs a piece of wood that is 3 feet in length. How many inches are in 3 feet?

- (F) 12 inches
 (G) 24 inches
 (H) 30 inches
 36 inches



Chapter Assessment Answer Key

Extended-Response Test, Page 284 *Sample Answers*

In addition to the scoring rubric found on page 285, the following sample answers may be used as guidance in evaluating open-ended assessment items.

- 1. a.** I would use gallons since it is the largest unit of capacity.
- b.** Since the desk is probably less than a yard tall, yard and mile are probably too large. Feet is the best measurement for the height of the desk.
- 2. a.** To convert larger units to smaller units, use multiplication. For example, 2 Tons = $2 \times 2,000$ pounds, or 4,000 pounds.
- b.** To convert smaller units of capacity to larger units, use division. For example, 12 cups = $12 \div 2$ pints, or 6 pints, which is equal to $6 \div 2$ quarts, or 3 quarts.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Read each question aloud to the student. Then write the student's answers on the lines below the question.

1. You need 2 yards of fabric for a project. How many feet is this?

6 ft

2. How many inches are in 2 yards?

72 in.

3. Tell how you found your answer.

Sample answer: I know that there are 6 feet in 2 yards, so I multiplied 6 by 12, since there are 12 inches in each foot.

4. If you had 4 pints, would this be equal to 2 quarts or 2 gallons?

2 qt

5. How many cups are in one quart?

4 c

6. Explain your answer.

There are 2 cups in every pint. There are 2 pints in every quart. So, there are 4 cups in every quart.

7. If a recipe called for a pint of molasses, and you had 16 fluid ounces of molasses, would you have enough?

yes

8. Explain how you know.

There are 8 fluid ounces in a cup, so there are 16 fluid ounces in a pint.

Oral Assessment (continued)

9. Which is the most reasonable estimate for the capacity of a large swimming pool: 2,000 fluid ounces, 3,000 cups, or 3,000 gallons? Explain.

3,000 gallons; See students' work.

10. The width of a garden measures 8 feet. What is the width of the garden in inches?

96 inches

11. A baby weighs 136 ounces at birth. How many pounds is this?

$8\frac{1}{2}$ lb

12. Which is the most reasonable estimate for the width of a house: 12 millimeters, 12 centimeters, 12 meters, or 12 kilometers? Explain.

12 m; Both 12 mm and 12 cm are too small, and 12 km is too large.

13. One chipmunk has a mass of 85 grams. Another chipmunk has a mass of 83,500 milligrams. Which chipmunk has the greater mass?

The chipmunk with a mass of 85 grams.

14. Tell how you found your answer.

Sample answer: $1\text{g} = 1,000\text{ mg}$, so $85\text{g} = 85,000\text{ mg}$, which is more than $83,500\text{ mg}$.

15. How many milliliters are in 6 liters?

6L = 6,000 mL

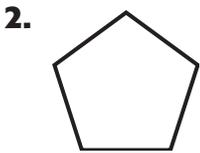
Am I Ready?

Practice

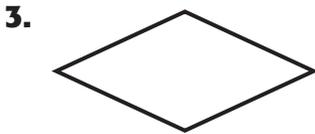
Name the number of sides and the number of angles in each figure.



1. 3 sides;
3 angles

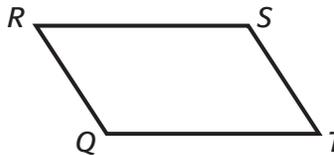


2. 5 sides;
5 angles



3. 4 sides;
4 angles

Use the figure at the right for Exercises 4 and 5.



4. Which side appears to have the same length as side RS ?

4. side QT

5. At which point do sides ST and TQ meet?

5. point T

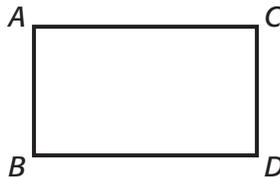
6. Draw a triangle that has two sides that are equal.

6. See students' work.

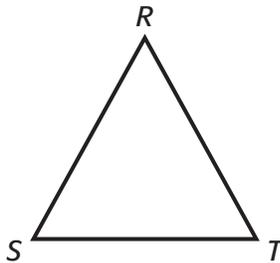
Am I Ready?

Review

Use the figure below to make each statement true.



1. Side AB appears to be the same length as side **CD** .
2. Side **AC** appears to be the same length as side BD .
3. Side AC and side CD meet at point **C** .
4. Side **BD** and side **DC** meet at point D .
5. Side AB and side **BD** meet at point B .



Use the figure above for Exercises 6–8.

6. Name the three sides of the triangle.
Sample answer: RT, TS, SR
7. Which two sides meet at point R ?
Sample answer: SR and TR
8. Which side is opposite point S ?
 RT or TR

Am I Ready?

Apply

1. The figure below shows the shape of a table. Name the number of sides and the number of angles.



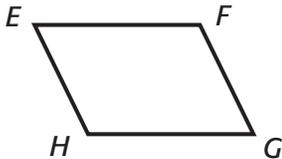
4 sides; 4 angles

2. The drawing below shows a skateboarding ramp. At which point do sides AC and BC meet?



point C

3. Mario drew a design using the shape shown below. Which side appears to be the same length as side FG ?



side EH

4. The figure below shows the shape of stones in a patio. Name the number of sides and the number of angles.



6 sides; 6 angles

5. Allie is drawing a triangle with no sides that are equal. Draw a sketch of this triangle.

Sample answer:

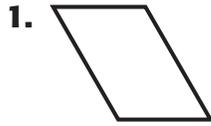


6. Joshua drew a picture of his house. The shape he drew was a rectangle. How many sides and angles did his picture have?

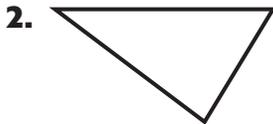
4 sides and 4 angles

Diagnostic Test

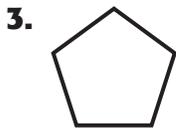
Name the number of sides and the number of angles in each figure.



1. 4 sides;
4 angles

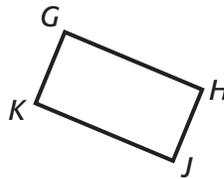


2. 3 sides;
3 angles



3. 5 sides;
5 angles

Use the figure at the right for Exercises 4–6.



4. Which side appears to have the same length as side KJ ?

4. side GH

5. At which point do sides KG and GH meet?

5. point G

6. Which two sides meet at point J ?

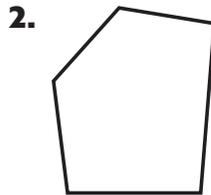
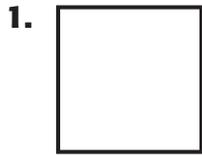
6. Sample answer:
 KJ and HJ

7. Sketch a four-sided figure that has all sides equal.

7. See students'
work.

Pretest

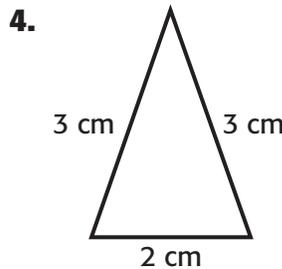
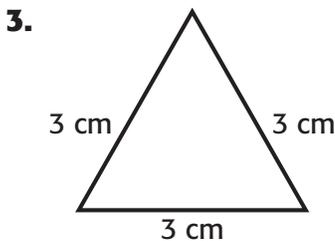
Name each polygon. Determine if it appears to be *regular* or *not regular*.



1. quadrilateral;
regular

2. pentagon;
not regular

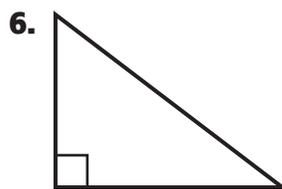
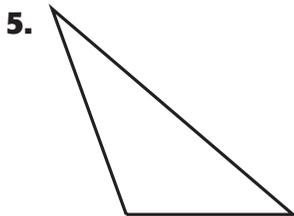
Classify each triangle based on its sides.



3. equilateral
triangle

4. isosceles
triangle

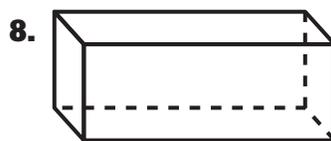
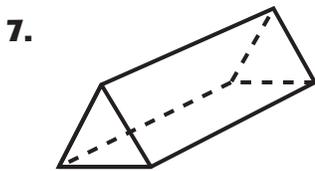
Classify each triangle based on its angles.



5. obtuse
triangle

6. right
triangle

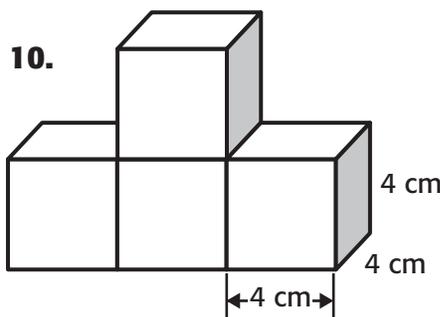
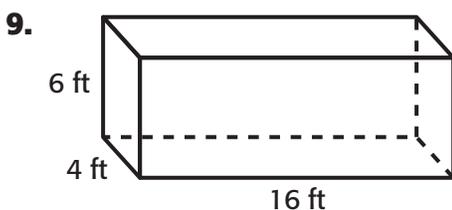
Describe the faces, edges, and vertices of each three-dimensional figure. Then identify it.



7. 3 rectangular faces,
2 triangular faces,
9 edges, 6 vertices;
triangular prism

8. 6 rectangular faces,
12 edges,
8 vertices;
rectangular prism

Find the volume of each prism.



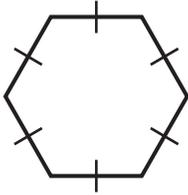
9. 384 ft³

10. 256 cm³

Check My Progress (Lessons 1 through 3)

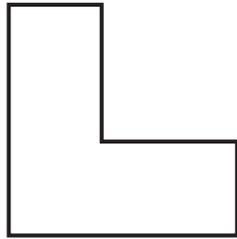
Name the polygon. Determine if it appears to be *regular* or *not regular*.

1.



1. hexagon;
regular

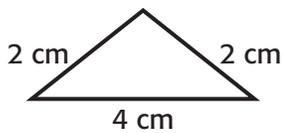
2.



2. hexagon;
not regular

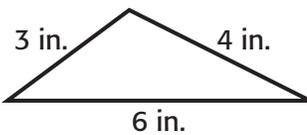
Determine the number of congruent sides. Then classify the triangle based on its sides.

3.



3. 2; isosceles triangle

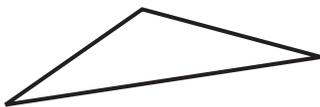
4.



4. 0; scalene triangle

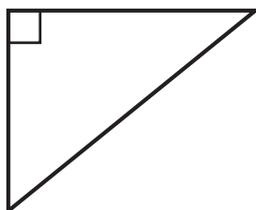
Classify the triangle based on its angles.

5.



5. obtuse triangle

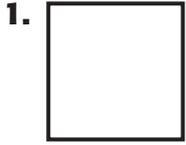
6.



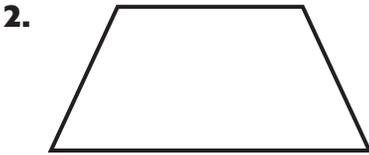
6. right triangle

Check My Progress (Lessons 4 through 7)

Describe the attributes of each quadrilateral. Then classify the quadrilateral.

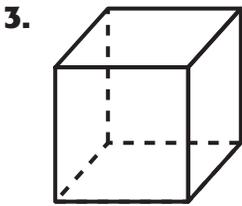


1. 4 sides congruent
and 4 right angles;
square

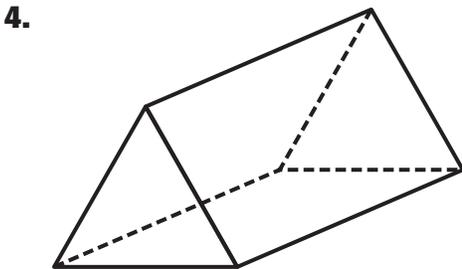


2. one pair of opposite
sides parallel;
trapezoid

Describe the faces, edges, and vertices of each three-dimensional figure. Then identify it.



3. 6 square faces,
12 edges, 8 vertices;
cube



4. 5 faces, 9 edges,
6 vertices;
triangular prism

5. Nathan drew a picture of a rectangle. Describe any parallel, perpendicular, or congruent sides of his picture.

5. Opposite side are
congruent and
parallel.

Vocabulary Test

Using the word bank below, complete each sentence by writing the correct term in the blank.

face	rectangular prism	scalene triangle	isosceles triangle
congruent	vertex	equilateral triangle	volume
composite figure			

1. A three-sided figure that has two sides of equal length is called a(n) isosceles triangle.
2. A three-sided figure with all three sides of equal length is called a(n) equilateral triangle.
3. A three-dimensional figure that is made up of other three-dimensional figures is called a composite figure.
4. The amount of space a three-dimensional figure contains. The formula for volume of a rectangular prism is length \times width \times height.
5. A three-sided figure having all three sides of different lengths is called a(n) scalene triangle.
6. Two figures that have the same size and shape are congruent.
7. A vertex is where three edges meet on a three-dimensional figure.
8. A prism with two rectangular, identical bases is called a rectangular prism.
9. The rectangular base of a prism is called a face.

Chapter Test, Form 1A

Read each question carefully. Write the letter for your answer on the line provided.

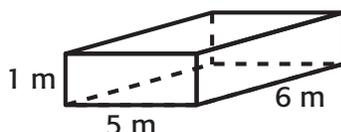
1. How many faces, edges, and vertices does a box of cereal have?

- A. 6 faces, 10 edges, 6 vertices
- B. 6 faces, 12 edges, 8 vertices
- C. 6 faces, 10 edges, 8 vertices
- D. 6 faces, 12 edges, 10 vertices

1. **B**

2. What is the volume?

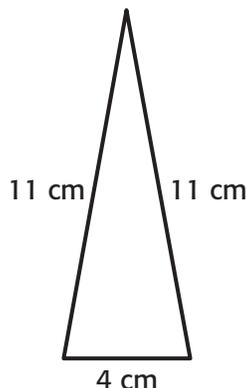
- F. 30 m^3
- G. 45 m^3
- H. 90 m^3
- I. 135 m^3



2. **F**

3. Classify the triangle by its sides.

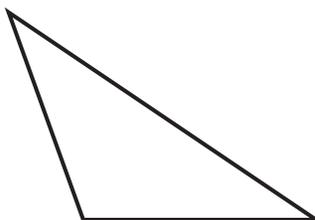
- A. acute triangle
- B. equilateral triangle
- C. isosceles triangle
- D. scalene triangle



3. **C**

4. Classify the triangle by its angles.

- F. equilateral triangle
- G. right triangle
- H. acute triangle
- I. obtuse triangle



4. **I**

5. Select one attribute that describes the quadrilateral.

- A. Both pairs of opposite sides are congruent and parallel.
- B. All sides are an equal length.
- C. There are no right angles.
- D. Only one pair of opposite sides are parallel.



5. **A**

Chapter Test, Form 1A (continued)

6. A store is stacking cans of food into a triangular display. The bottom layer has 11 cans. There are 6 layers. If there are two fewer cans in each layer, how many cans are in the display?

F. 34 cans H. 36 cans
G. 35 cans I. 37 cans

6. **H**

7. Adel makes a composite figure by stacking 4 rectangular prisms that are each 3 inches by 5 inches by 7 inches. Find the volume for the composite figure.

A. 420 in^2 C. 693 in^2
B. 420 in^3 D. 693 in^3

7. **B**

8. Mr. Ayala wants to fill a canister with peanuts. Which measurement does he need to find to determine the amount of peanuts that will fit?

F. area H. surface area
G. perimeter I. volume

8. **I**

9. Mrs. Smith stacked 6 cubes on top of one another to make a tower. If the tower is sitting on the floor, how many of the cubes' faces can Mrs. Smith see?

A. 24 faces C. 26 faces
B. 25 faces D. 30 faces

9. **B**

10. Shu Ping draws a regular hexagon. The total length of the sides is 30 feet. What is the length of one side?

F. 5 feet H. 7 feet
G. 6 feet I. 8 feet

10. **F**

11. Rosa drew a triangle with sides measuring 36 inches, 20 inches, and 24 inches. What type of triangle did Rosa draw?

A. equilateral triangle C. scalene triangle
B. acute triangle D. isosceles triangle

11. **C**

Chapter Test, Form 1B

Read each question carefully. Write the letter for your answer on the line provided

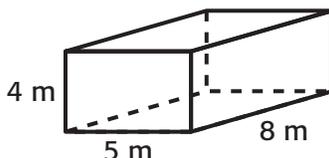
1. How many faces, edges, and vertices does a number cube have?

- A. 6 faces, 8 vertices, 6 edges
- B. 6 faces, 10 vertices, 10 edges
- C. 6 faces, 8 vertices, 12 edges
- D. 6 faces, 10 vertices, 8 edges

1. **C**

2. What is the volume?

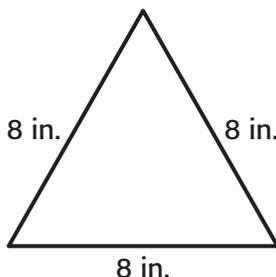
- F. 175 m^3
- G. 160 m^3
- H. 80 m^3
- I. 28 m^3



2. **G**

3. Classify the triangle by its sides.

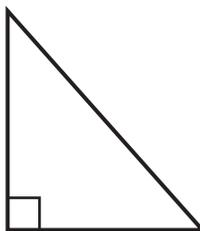
- A. acute triangle
- B. equilateral triangle
- C. isosceles triangle
- D. scalene triangle



3. **B**

4. Classify the triangle by its angles.

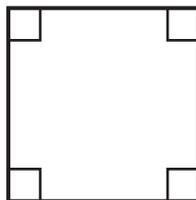
- F. equilateral triangle
- G. acute triangle
- H. right triangle
- I. obtuse triangle



4. **H**

5. Select one attribute that describes the quadrilateral.

- A. No sides are congruent or parallel.
- B. Only one pair of opposite sides are parallel.
- C. There are no right angles.
- D. All sides are an equal length.



5. **D**

Chapter Test, Form 1B (continued)

6. A store is stacking cans of food into a triangular display. The bottom layer has 12 cans. There are 6 layers. If there are two fewer cans in each layer, how many cans are in the display?

F. 41 cans H. 43 cans
G. 42 cans I. 44 cans

6. **G**

7. Adrianna makes a composite figure by stacking 4 rectangular prisms that are each 4 inches by 2 inches by 6 inches. Find the volume for the composite figure.

A. 192 in^3 C. 240 in^2
B. 192 in^2 D. 240 in^3

7. **A**

8. Nigel wants to fill a canister with popcorn. Which measurement does he need to find to determine the amount of popcorn that will fit?

F. area H. surface area
G. perimeter I. volume

8. **I**

9. Odette stacked 7 cubes on top of one another to make a tower. If the tower is sitting on the floor, how many of the cubes' faces can Odette see?

A. 29 faces C. 32 faces
B. 30 faces D. 35 faces

9. **A**

10. Perry draws a regular hexagon. The total length of the sides is 48 feet. What is the length of one side?

F. 7 feet H. 9 feet
G. 8 feet I. 13 feet

10. **G**

11. Desta drew a triangle with sides measuring 20 inches, 15 inches, and 15 inches. What type of triangle did Rosa draw?

A. equilateral triangle
B. right triangle
C. isosceles triangle
D. scalene triangle

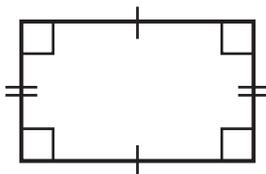
11. **C**

Chapter Test, Form 2A

Read each question carefully. Write the letter for your answer on the line provided.

1. Which term best classifies the quadrilateral?

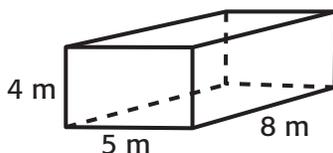
- A. parallelogram C. rectangle
B. rhombus D. square



1. **C**

2. What is the volume?

- F. 160 m^3 H. 200 m^2
G. 184 m^2 I. 200 m^3



2. **F**

3. Which three-dimensional figure has 5 faces, 9 edges, and 6 vertices?

- A. rectangular prism C. cube
B. triangle D. triangular prism

3. **D**

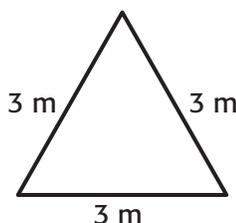
4. Rosemary is packing boxes of crackers into a crate. She can fit 6 boxes along the bottom of the crate. If the crate is filled with 5 layers of cracker boxes, how many cracker boxes are in the crate?

- F. 24 boxes H. 30 boxes
G. 25 boxes I. 36 boxes

4. **H**

5. What type of triangle is shown?

- A. obtuse triangle
B. isosceles triangle
C. equilateral triangle
D. scalene triangle



5. **C**

Chapter Test, Form 2A *(continued)*

Read each question carefully. Write your answer on the line provided.

6. Describe the number of faces, edges, and vertices of a math book.

6. There are 6 rectangular faces, 12 edges, and 8 vertices.

7. Describe the faces, edges, and vertices of the three-dimensional figure. Then identify it.



7. There are 6 square faces, 12 edges, and 8 vertices. The figure is a cube.

8. Find the volume of a rectangular prism with length 11 meters, width 4 meters, and height 15 meters.

8. 660 m³

9. Walter has a triangle that measures 24 inches by 18 inches by 36 inches. What type of triangle does he have?

9. scalene triangle

10. How much cement is needed to build a sidewalk that is 180 inches long, 24 inches wide, and 4 inches thick?

10. 17,280 in³

11. Ty is painting a rectangle that is 10 inches long and 7 inches high. What attributes of a rectangle can you share with Ty to help him paint his rectangle?

11. Sample answer: opposite sides are congruent and parallel; there are 4 right angles

12. Zain bought ice cream and sherbet at the grocery store and is placing the containers in the freezer. The container of ice cream was sold in a 10" × 14" × 12" container, and the sherbet was sold in an 11" × 18" × 9" container. How much less space does the container of ice cream occupy than the container of sherbet?

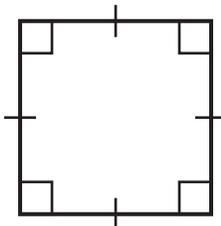
12. 102 in³

Chapter Test, Form 2B

Read each question carefully. Write the letter for your answer on the line provided

1. Which term best classifies the quadrilateral?

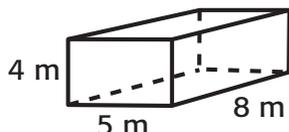
- A. trapezoid
- B. rhombus
- C. rectangle
- D. square



1. **D**

2. What is the volume?

- F. 160 m^3
- G. 80 m^3
- H. 28 m^3
- I. 17 m^3



2. **F**

3. Which three-dimensional figure has 6 square faces, 12 edges, and 8 vertices?

- A. rectangular prism
- B. triangle
- C. triangular prism
- D. cube

3. **D**

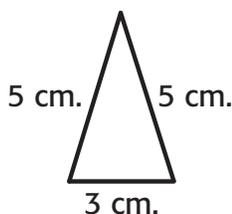
4. Nena is packing boxes of wafers into a shipping box. She can fit 7 boxes along the bottom of the box. If the box is filled with 4 layers of wafer boxes, how many wafer boxes are in the packing box?

- F. 14 boxes
- G. 16 boxes
- H. 26 boxes
- I. 28 boxes

4. **I**

5. What type of triangle is shown?

- A. isosceles triangle
- B. right triangle
- C. scalene triangle
- D. equilateral triangle



5. **A**

Chapter Test, Form 2B *(continued)*

Read each question carefully. Write your answer on the line provided.

6. Describe the number of faces, edges, and vertices of a triangular prism.

6. There are
3 rectangular faces,
2 triangular bases,
9 edges, and 6 vertices.

7. Describe the faces, edges, and vertices of the three-dimensional figure. Then identify it.



7. There are
6 rectangular faces,
12 edges, and
8 vertices. The figure
is a rectangular prism.

8. Find the volume of a rectangular prism with length 7 feet, width 6 feet, and height 4 feet.

8. 168 ft³

9. Seth has a triangle that measures 20 inches by 20 inches by 35 inches. What type of triangle does he have?

9. isosceles triangle

10. How much cement is needed to build a sidewalk that is 132 inches long, 24 inches wide, and 3 inches thick?

10. 9,504 in³

11. Tad is painting a square whose sides each measure 11 feet long. What attributes of a square can you share with Tad to help him paint his figure?

Sample answer:
11. all sides are
congruent; there
are 4 right angles

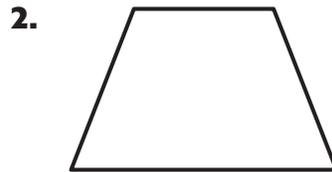
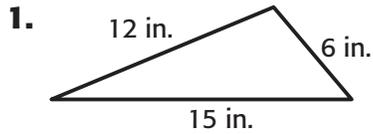
12. Yuri bought ice cream and sherbet at the grocery store and is placing the containers in the freezer. The container of ice cream was sold in an 11" × 15" × 13" container, and the sherbet was sold in a 12" × 19" × 9" container. How much more space does the container of ice cream occupy than the container of sherbet?

12. 93 in³

Chapter Test, Form 3A

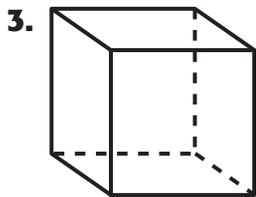
Read each question carefully. Write your answer on the line provided.

Classify each figure.



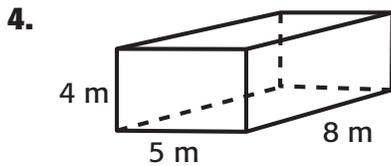
1. scalene triangle

2. trapezoid

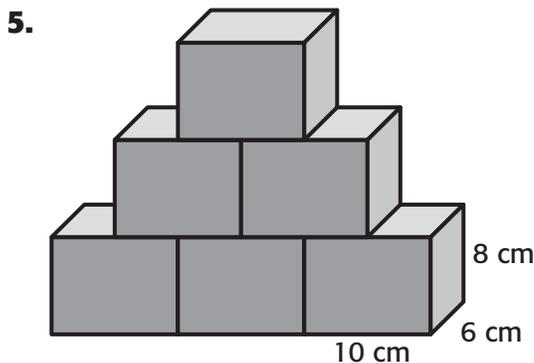


3. cube

Find the volume of each figure.



4. 160 m³



5. 2,880 cubic cm

6. rectangular prism

$$l = 8 \text{ m}, w = 4 \text{ m}, h = 7 \text{ m}$$

6. 224 m³

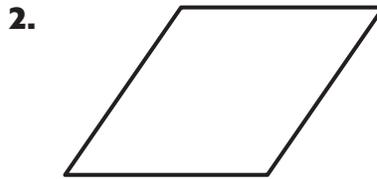
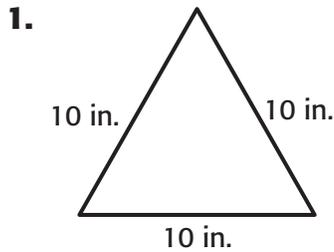
Chapter Test, Form 3A *(continued)*

- | | |
|--|--|
| <p>7. Describe the faces, edges, and vertices of a triangular prism.</p> | <p>7. <u>There are</u>
3 rectangular faces,
2 triangular bases,
9 edges, and 6 vertices.</p> |
| <p>8. Describe the sides of a scalene triangle.</p> | <p>8. <u>All three sides</u>
have a different
length.</p> |
| <p>9. Claudia is building a three-dimensional figure that has 6 square faces, 12 edges, and 8 vertices. What shape is she building?</p> | <p>9. <u>cube</u></p> |
| <p>10. Leon wants to use a box for storage. If the box is 11 inches high, 13 inches wide, and 18 inches deep, how many cubic inches of space does he have for storage?</p> | <p>10. <u>volume;</u>
2,574 in³</p> |
| <p>11. Mykey and Roy are designing a kitchen counter. The counter has 4 sides. Opposite sides are parallel and congruent. Each corner of the counter is a right angle. Classify the shape of the kitchen counter.</p> | <p>11. <u>rectangle</u></p> |
| <p>12. Kuron Pool is a rectangular prism with length 15 feet, width 8 feet, and height 5 feet. Find the volume of the pool.</p> | <p>12. <u>600 ft³</u></p> |
| <p>13. Ervin is building two cabinets. They are each 2 feet tall, 2 feet long, and 1 foot wide. What is their total volume?</p> | <p>13. <u>8 cubic feet</u></p> |

Chapter Test, Form 3B

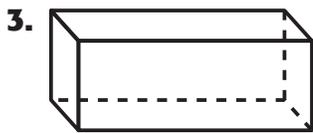
Read each question carefully. Write your answer on the line provided.

Classify each figure.



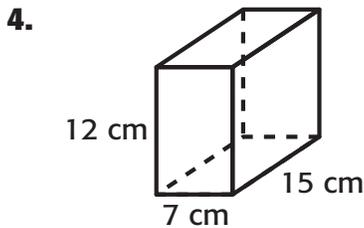
1. equilateral triangle

2. rhombus

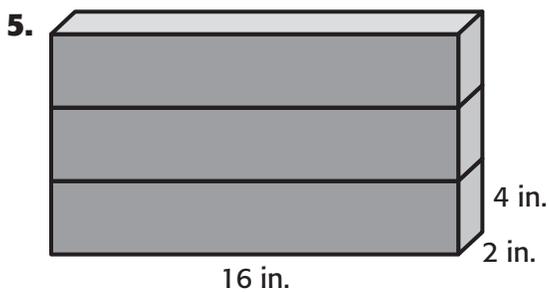


3. rectangular prism

Find the volume of each figure.



4. 1,260 cm³



5. 384 cubic inches

6. rectangular prism

$$\ell = 9 \text{ m}, w = 4 \text{ m}, h = 15 \text{ m}$$

6. 540 m³

Chapter Test, Form 3B *(continued)*

- | | |
|---|--|
| <p>7. Describe the faces, edges, and vertices of a rectangular prism.</p> | <p>7. <u>There are</u>
<u>4 rectangular faces,</u>
<u>2 rectangular bases, 12</u>
<u>edges, and 8 vertices.</u></p> |
| <p>8. Describe the faces, edges, and vertices of a triangular prism.</p> | <p>8. <u>There are 5 faces,</u>
<u>9 edges, and</u>
<u>6 vertices.</u></p> |
| <p>9. Cheryl is building a three-dimensional figure that has 5 faces, 9 edges, and 6 vertices. What shape is she building?</p> | <p>9. <u>triangular prism</u></p> |
| <p>10. Horace wants to use a plastic tote for storage. If the tote is 8 inches high, 18 inches wide, and 12 inches deep, how many cubic inches of space does he have for storage?</p> | <p>10. <u>volume; 1,728 in³</u></p> |
| <p>11. DaVaughn and Henrick are designing a kitchen counter. The counter has 4 sides. One pair of opposite sides are parallel and congruent. There are no right angles. Classify the shape of the kitchen counter.</p> | <p>11. <u>trapezoid</u></p> |
| <p>12. A piranha tank is 12" × 6" × 10". What is the volume of the tank?</p> | <p>12. <u>720 in³</u></p> |
| <p>13. Carly is stacking 4 shoe boxes on top of each other. If each box is 8 inches long, 7 inches wide, and 4 inches high, what is the total volume?</p> | <p>13. <u>896 cubic inches</u></p> |

Standardized Test Practice

Read each question. Fill in the correct answer.

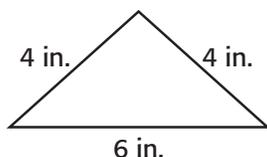
1. Bernadine receives an annual salary of \$24,544. She receives 52 equal paychecks throughout the year. How much does she receive in each paycheck?

- (A) \$452
- (B) \$472
- (C) \$572
- (D) \$672

4. Marcy wants to store toys in a bin that has a length of 11 inches, a width of 7 inches, and a height of 6 inches. How much space is inside the bin?

- (F) 370 in^3
- (G) 462 in^3
- (H) 470 in^3
- (I) 562 in^3

2. Sampson drew the triangle below. Classify the triangle by its sides.



- (F) scalene triangle
- (G) right triangle
- (H) equilateral triangle
- (I) isosceles triangle

5. Savannah practiced ballet 1.67 hours on Monday. On Wednesday, she practiced for 3.25 hours. How much longer did Savannah practice on Wednesday than on Monday?

- (A) 1.58 hours
- (B) 2.42 hours
- (C) 3.42 hours
- (D) 4.92 hours

3. What is the missing value in the table?

Input	1	2	3	4	5
Output	4	■	10	13	16

- (A) 9
- (B) 8
- (C) 7
- (D) 6

6. Ethan saw the following three-dimensional figure. Classify the figure.



- (A) rectangular prism
- (B) triangular prism
- (C) cube
- (D) rectangle

Standardized Test Practice *(continued)*

7. How many pairs of opposite sides are parallel in a trapezoid?

- (A) 0 (C) 2
 1 (D) 3

8. Bus A arrives at the bus stop every 15 minutes, and Bus B arrives every 20 minutes. Both are at the bus stop right now. In how many minutes will both buses be at the bus stop again?

- (F) 5 min 60 min
 (G) 20 min (I) 120 min

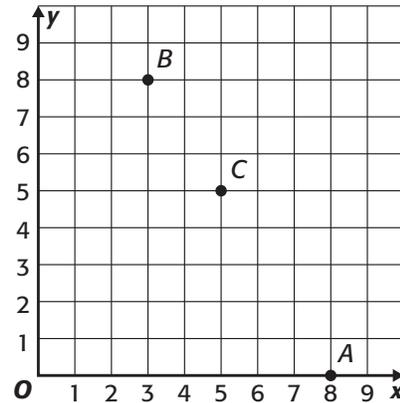
9. The width of Jamison's yard is $41\frac{1}{8}$ feet. What is the width of his neighbor's yard if it is $3\frac{7}{8}$ feet shorter than Jamison's yard?

- (A) $35\frac{1}{4}$ ft
 (B) $36\frac{1}{2}$ ft
 $37\frac{1}{4}$ ft
 (D) $37\frac{1}{2}$ ft

10. Jaclyn is making a patchwork quilt. Each patch is in the shape of a parallelogram. If each patch has a base of 5 inches and a height of 6 inches, what is the area in square inches of each patch?

- (F) 25 square inches
 (G) 26 square inches
 (H) 28 square inches
 30 square inches

Use the coordinate graph for Exercises 11 and 12.



11. Name the coordinates for point B.

- (A) (0,8)
 (B) (3,5)
 (3,8)
 (D) (8,3)

12. Which point has the coordinates (8, 0)?

- A
 (G) B
 (H) C
 (I) y



Chapter Assessment Answer Key

Extended-Response Test, Page 310 *Sample Answers*

In addition to the scoring rubric found on page 311, the following sample answers may be used as guidance in evaluating open-ended assessment items.

- 1. a.** Sample answer: a six sided shape with all sides congruent.
- b.** Rectangular prism because it has six rectangular faces.
- 2. a.** Multiply the bag's base, width, and height. The bag's volume is $1,872 \text{ in}^3$.
- b.** Sample answer: I would find the volume of one of the blocks by multiplying $3 \text{ cm} \times 1 \text{ cm} \times 2 \text{ cm} = 6 \text{ cm}^3$ and then I would multiply that by the number of blocks, $6 \text{ cm}^3 \times 5 = 30 \text{ cm}^3$.

Extended-Response Rubric

Score	Description
4	A score of four is a response in which the student demonstrates a thorough understanding of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	A score of three is a response in which the student demonstrates an understanding of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor flaws that reflect inattentive execution of mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	A score of two indicates that the student has demonstrated only a partial understanding of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	A score of one indicates that the student has demonstrated a very limited understanding of the mathematics concepts and/or procedures embodied in the task. The student's response is incomplete and exhibits many flaws. Although the student's response has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many flaws or may be incomplete.
0	A score of zero indicates that the student has provided no response at all, or a completely incorrect or uninterpretable response, or demonstrated insufficient understanding of the mathematics concepts and/or procedures embodied in the task. For example, a student may provide some work that is mathematically correct, but the work does not demonstrate even a rudimentary understanding of the primary focus of the task.

Oral Assessment

Show the student a triangular prism or draw one on the board.

Read each question aloud to the student. Then write the student's answers on the lines below the question.

1. How many faces does this figure have?

5

2. How many vertices does this figure have?

6

3. How many edges does this figure have?

9

4. What is this figure called?

triangular prism

5. How do you know what this figure is called?

Sample answer: The figure has two faces that are triangles and three faces that are rectangles.

Draw an equilateral triangle on the board.

6. How would you classify this triangle?

Sample answer: I would measure to find the lengths of each side are congruent then I would classify it as an equilateral triangle.

7. Draw an regular polygon.

See students' work.

Oral Assessment *(continued)*

Draw a rectangular prism on the board.

Read each question aloud to the student. Then write the student's answers on the lines below the question.

8. How many faces does this figure have?

6

9. How many vertices does this figure have?

8

10. How many edges does this figure have?

12

11. What is this figure called, and how do you know what this figure is called?

Sample answer: The figure is called a rectangular prism. It has four faces that are rectangles and two bases that are congruent and parallel.

12. How would you find the volume of this figure?

Sample answer: Multiply the figure's length, width, and height.

13. Use a ruler to find the figure's volume.

See students' work.
