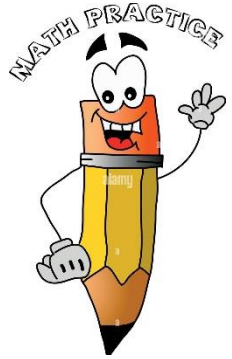
EOT 3- Exam Coverage-

Grade 4- ANSWERS

Miss Tasneem Hassen

Al Maseera School

2024

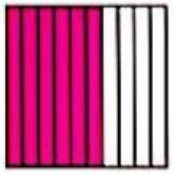


Part 1 type questions	**درجة ألسئلة الموضوعية** **MCQ- 4 marks per question**	**عدد ألسئلة الموضوعية** **Number of questions: 15**	$15 \times 4 = 60\ Marks$

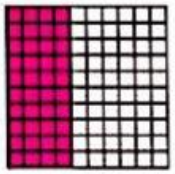
U12-1	Understand Tenths and Hundredths	Question (1-9) Question 10	Page 133 Page 154

How can you shade the grid to represent the fraction?

1. $\frac{6}{10}$



2. $\frac{40}{100}$



What fraction does the grid represent?

3. $\frac{8}{10}$

4. $\frac{20}{100}$

How can you express the fraction as an equivalent fraction with a denominator of 10 or 100? Complete the equation.

5. $\frac{70}{100} = \frac{7}{10}$

6. $\frac{50}{100} = \frac{5}{10}$

7. $\frac{2}{10} = \frac{20}{100}$

8. $\frac{6}{10} = \frac{60}{100}$

9. Which of these are equivalent to a fraction with a denominator of 10? Choose all that apply.

A. $\frac{3}{100}$

B. $\frac{10}{100}$

C. $\frac{25}{100}$

D. $1\frac{40}{100}$

Review

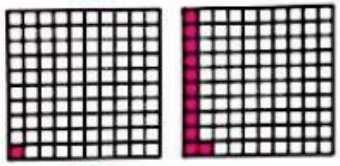
10. What number makes the equation true? (Lesson 12-1)

$\frac{50}{100} = \frac{5}{10}$

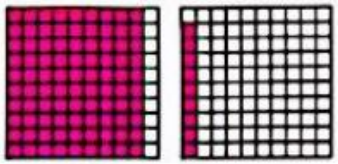
U12-3	Compare Decimals	Question (1-8) Question (9-12)	Page 141 Page 142

How can you use the representations to compare the decimals?
Complete with >, <, or =.

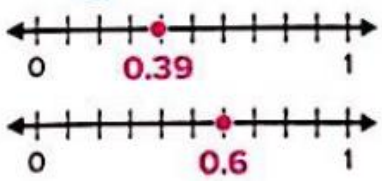
1. 0.01 < 0.11



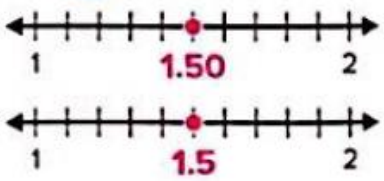
2. 0.9 > 0.09



3. 0.39 < 0.6



4. 1.50 = 1.5



How can you express the decimals as fractions to compare?
Write the fractions, and complete with >, <, or =.

5. 0.62 > 0.26

$\frac{62}{100} > \frac{26}{100}$

6. 0.57 < 0.7

$\frac{57}{100} < \frac{70}{100}$

What comparison statement can you write for the decimals?
Explain your thinking.

7. 0.27 and 0.4

Sample answer: 0.27 < 0.4; 4 tenths is greater than 2 tenths.

8. 1.4 and 0.63

Sample answer: 1.4 > 0.63; The whole number 1 is greater than the whole number 0.

9. Which comparisons are true? Choose all that apply.

A. 0.4 = 0.04
B. 0.78 < 0.9
C. 0.27 > 0.3
D. 2.51 > 2.3

10. **Error Analysis** Mandy writes 2.30 > 2.3 because 30 is greater than 3. How would you respond to Mandy?

Sample answer: Mandy interpreted 2.30 as 2 wholes and 30 parts of the whole, and 2.3 as 2 wholes and 3 parts. However, 0.30 = 0.3 since 30 hundredths equals 3 tenths, so 2.30 = 2.3.

11. Carter bought 0.72 pound of apples and 0.58 pound of bananas. Which weighed more, the apples or the bananas? Explain your thinking.

Apples; Sample answer: 72 hundredths is more than 58 hundredths, so 0.72 > 0.58.

12. **Extend Your Thinking** James compares two decimals that have the same digits. Part of his comparison is shown. What could be the other number in James's comparison? Justify your answer.

1.82 > 1 . 2 8

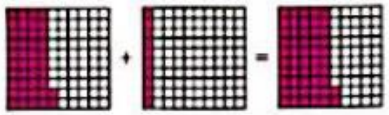
Sample answer: 1.82 is greater than 1.28 because 82 hundredths is more than 28 hundredths.

U12-4	Adding Decimals Using Fractions	Question (1-8) Question (9-12)	Page 147 Page 148

How can you use the representation to find the sum?

1. $\frac{2}{10} + \frac{11}{100} = \frac{31}{100}$

2. $\frac{42}{100} + \frac{1}{10} = \frac{52}{100}$



What is the sum? Explain your work.

3. $\frac{4}{10} + \frac{9}{100} = \frac{49}{100}$

Sample answer: $\frac{4}{10} = \frac{40}{100}$, and $\frac{40}{100} + \frac{9}{100} = \frac{49}{100}$

4. $\frac{53}{100} + \frac{3}{10} = \frac{83}{100}$

Sample answer: $\frac{3}{10} = \frac{30}{100}$, and $\frac{53}{100} + \frac{30}{100} = \frac{83}{100}$

5. $\frac{2}{10} + \frac{13}{100} = \frac{33}{100}$

Sample answer: $\frac{2}{10} = \frac{20}{100}$, and $\frac{20}{100} + \frac{13}{100} = \frac{33}{100}$

6. $\frac{21}{100} + \frac{7}{10} = \frac{91}{100}$

Sample answer: $\frac{7}{10} = \frac{70}{100}$, and $\frac{21}{100} + \frac{70}{100} = \frac{91}{100}$

7. Keegan walks $\frac{5}{10}$ mile to meet his friend. Then Keegan and his friend walk $\frac{35}{100}$ mile to the park. How far did Keegan walk in all?

$\frac{85}{100}$ mile

8. Which addition problems have a sum of $\frac{62}{100}$? Choose all that apply.

(A) $\frac{6}{10} + \frac{2}{100}$

B. $\frac{6}{100} + \frac{2}{10}$

(C) $\frac{4}{10} + \frac{22}{100}$

D. $\frac{4}{10} + \frac{58}{100}$

9. **STEM Connection** Grace notes that $\frac{7}{10}$ of her computer's memory is filled. She opens a new program that takes $\frac{23}{100}$ of the computer's memory. What fraction of her computer's memory is full?

$\frac{93}{100}$

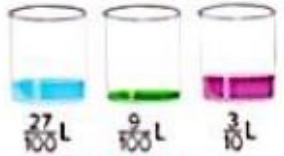
10. Complete the following addition problem. Justify your answer.

$\frac{5}{10} + \frac{4}{100} = \frac{54}{100}$ Sample answer: I know $\frac{54}{100} = \frac{50}{100} + \frac{4}{100}$, and $\frac{50}{100} = \frac{5}{10}$.

11. Ling paints $\frac{6}{10}$ of a mural on Saturday. She paints $\frac{25}{100}$ of the mural on Sunday. What fraction of the mural did she complete?

$\frac{85}{100}$ of the mural

12. **Extend Your Thinking** Two liquids were combined into an empty beaker. The beaker now has more than $\frac{1}{2}$ liter of liquid in it. Which two liquids were combined? Explain.



The blue and the purple liquids. Sample explanation: Half would be $\frac{50}{100}$ liter, and $\frac{27}{100} + \frac{3}{10} = \frac{27}{100} + \frac{30}{100} = \frac{57}{100}$, which is more than half.

How can you convert the metric units? Complete the equation.

1. 12 meters = ? centimeters
   12 × 100 = 1,200
   12 meters = 1,200 centimeters

2. 8 kilograms = ? grams
   8 × 1,000 = 8,000
   8 kilograms = 8,000 grams

3. 14 centimeters = 140 millimeters

4. 25 liters = 25,000 milliliters

5. 4 centimeters = 40 millimeters

6. 6 meters = 6,000 millimeters

7. 10 liters = 10,000 milliliters

8. 200 meters = 20,000 centimeters

9. How many milliliters of water will fill the tea kettle? Explain.

2,000 milliliters; Sample answer: I can multiply 2 by 1,000 to find the number of milliliters.

10. An inchworm crawls 3 meters. What are two other ways to represent the same distance using smaller units?

Sample answer: 300 centimeters, 3,000 millimeters.

11. A box of printer paper weighs 9 kilograms. Does the box weigh more than 9,000 grams?

No, the box weighs 9 kilograms and 9,000 grams is equal to 9 kilograms.

12. In 6 kilometers, there are 6,000 meters. Why does the number with the measurement units increase from 6 to 6,000?

Sample answer: There are 1,000 meters in each kilometer, so the number increases 1,000 times as much.

13. Would it be easier to lift the weight shown or one that weighs 5,000 grams? Explain.

Sample answer: They both have the same mass.

14. **STEM Connection** Noah measures 2 liters of fluids. What is the equivalent amount of fluids in milliliters?

2,000 milliliters.

15. **Extend Your Thinking** Asher runs a 1,000-meter race and his mother runs a 5-kilometer race. How far do they run in all?

6 kilometers or 6,000 meters

U13-2	Relate Customary Units of Weight	Question (1-11) Question (12-15)	Page 167 Page 168

What number makes the equation true?

1. 5 pounds = ? ounces

   5 × 16 = 80

   5 pounds = 80 ounces

2. 8 tons = ? pounds

   8 × 2,000 = 16,000

   8 tons = 16,000 pounds

3. 4 pounds = 64 ounces

4. 5 tons = 10,000 pounds

5. 96 ounces = 6 pounds

6. 14,000 pounds = 7 tons

7. 10 pounds = 160 ounces

8. 20 tons = 40,000 pounds

9. Mike bought 7 pounds of tomatoes to make a batch of pizza sauce. What is the weight of the tomatoes in ounces?

   112 ounces

10. There are 160 ounces of potatoes in a 10-pound bag. Why is the number of ounces greater than the number of pounds?

    Sample answer: For every 1 pound, there is 16 ounces. 10 × 16 = 160, so there are 160 ounces in 10 pounds.

11. A minivan weighs 3 tons. A truck weighs 8,000 pounds. Which vehicle weighs more? Explain.

    The truck weighs more. Sample answer: I converted 3 tons to get 6,000 pounds which is less than the truck.

12. Jack bought $1\frac{1}{2}$ pounds of bananas. What is the weight of the bananas in ounces?

    24 ounces

13. A truck weighs $2\frac{3}{4}$ tons. What is the weight of the truck in pounds?

    5,500 pounds

14. Mark delivered 1 ton of fertilizer to the botanical garden. Each day they spread 50 pounds of fertilizer on the plants. How many days will it take to spread all the fertilizer? Explain.

    40 days; Sample answer: I converted 1 ton to 2,000 pounds and determined that 2,000 is 40 groups of 50.

15. **Extend Your Thinking** Reeb's Market offers a 10-pound watermelon for $5. Sally's Produce Stand offers a 165-ounce watermelon for $5 also. Which is the better buy? Explain.

    Sally's Produce Stand; Sample answer: 165 ounces is greater than 10 pounds or 160 ounces. The watermelon with the greater weight is the better buy.

U13-3	Relate Customary Units of Capacity	Question (1-10) Question (11-14)	Page 171 Page 172

Complete the table.

1.

Cups (c)	Fluid Ounces (fl oz)
1	8
2	16
3	24
4	32
5	40

2.

Quarts (qt)	Pints (pt)
1	2
2	4
3	6
4	8
5	10

What number makes the equation true?

3. 6 cups = 48 fluid ounces

4. 8 quarts = 16 pints

5. 16 quarts = 4 gallons

6. 14 cups = 7 pints

7. Jerry's coffee pot holds 4 cups of coffee. How many fluid ounces does the pot hold?

   32 fluid ounces

8. The baseball teams drink 10 gallons of water at a tournament. How many quarts of water do they drink?

   40 quarts

9. Kelly's juice recipe uses 16 quarts of water. How many gallons does her recipe use?

   ? × 4 = 16; 4 gallons

10. Ben used 40 pints of water to fill his new aquarium. How many quarts does the aquarium hold?

    ? × 2 = 40; 20 quarts

11. Kayla has a pitcher that holds 18 pints and a punch bowl that holds 3 gallons. Which holds more? Explain your answer.

    Punch bowl; Sample answer: The capacity of the punch bowl is 3 gallons, which is equivalent to 12 quarts, or 24 pints. The pitcher holds 18 pints and the punch bowl holds 24 pints.

12. Jack used $2\frac{1}{2}$ quarts of oil for the lawnmower. How many pints of oil did he use? Explain how you found the solution.

    5 pints; Sample answer: I multiplied 2 quarts by 2 to get 4 pints, and then found $\frac{1}{2}$ of 2 pints to get 1 pint. The sum of 4 and 1 is 5.

13. Celia made 12 quarts of lemonade. She is filling bottles that can hold 2 cups. How many bottles can she fill? Explain.

    24 bottles; Sample answer: 12 quarts is equivalent to 48 cups. 48 cups will fill 24 2-cup bottles. 24 bottles.

14. **Extend Your Thinking** Geraldo can fill 7 cups every 30 seconds from his indoor faucet. He can fill 2 quarts every 30 seconds from his outdoor faucet. Which faucet would fill a bucket faster? Explain.

    The outdoor faucet. Sample answer: I converted 2 quarts to 8 cups, so the outdoor faucet would fill the bucket faster.

U13-4	Convert Units of Time	Question (1-10) Question (11-15)	Page 175 Page 176

What number makes the equation true?

1. 5 hours = ? minutes
   5 × 60 = 300
   5 hours = 300 minutes

2. 10 minutes = ? seconds
   10 × 60 = 600
   10 minutes = 600 seconds

3. 7 hours = 420 minutes

4. 6 minutes = 360 seconds

5. 6 hours = 360 minutes

6. 15 hours = 900 minutes

7. Salma volunteered for 4 hours last weekend. How many minutes did Salma volunteer? **240 minutes**

8. When a timer reads 8 minutes, that is 480 seconds. Why is the number of seconds greater than the number of minutes?
   Sample answer: Seconds is the smaller unit of time and the smaller the unit, the greater the number of units.

9. Lola sang a song that was 4 minutes long. Selina sang a song that was 220 seconds long. Who sang longer? Explain.
   Lola; Sample answer: Lola sang for 240 seconds which is longer than the 220 seconds that Selina sang.

10. Nathan and Chad are running in a $\frac{1}{2}$-mile relay race. Chad runs the first part in 3 minutes. Nathan runs the second part in 150 seconds. Who took longer? How much longer?
    Chad; 30 seconds

11. **Error Analysis** Kyle converted $4\frac{1}{4}$ hours to 244 minutes. Do you agree with Kyle? Explain.
    I do not agree with Kyle. Sample answer: $4\frac{1}{4}$ hours = 255 minutes because $4\frac{1}{4} \times 60 = \left(4 + \frac{1}{4}\right) \times 60$; 240 + 15 = 255.

12. Leann spent 3 hours online last week. If she spent the same amount of time online each of 5 days, how many minutes would she spend online in a day?
    36 minutes

13. Diane boiled an egg for $9\frac{1}{2}$ minutes. For how many seconds did she boil the egg?
    570 seconds

14. Stacy reads a page in 3 minutes. How many seconds does it take?
    180 seconds

15. **Extend Your Thinking** There are 24 hours in one day. Explain how many minutes there are in one week.
    Sample answer: There are 60 minutes × 24 hours or 1,440 minutes in 1 day. There are 7 days in 1 week, so I can multiply 1,440 by 7 to find there are 10,080 minutes in 1 week.

U13-5	Solve Problems That Involve Units of Measure	Question (1-6) Question (7-10)	Page 179 Page 180

Solve the problem.

1. Lacey walks $1\frac{1}{2}$ kilometers to school. Hsu walks 2 kilometers to school. How many meters do Lacey and Hsu walk in all?

   3,500 meters

2. Jeanette made 6 liters of soup. She serves 5,500 milliliters of the soup. How many milliliters of the soup remain?

   500 milliliters

3. A restaurant owner buys 8 sacks of potatoes. Each sack of potatoes has a mass of 5 kilograms. How many grams of potatoes does he buy?

   40,000 grams

4. Niamh has 320 centimeters of red ribbon and 6,300 millimeters of blue ribbon. How many more millimeters of blue ribbon than red ribbon does she have?

   3,100 millimeters

5. **STEM Connection** Saffron makes a recipe that calls for 100 milliliters of olive oil. How many times can she make the recipe with 1 liter of olive oil? Justify your answer.

   10 times; Sample answer: 1 liter = 1,000 milliliters, 100 × 10 = 1,000

6. Sylvia has 30 milliliters of red dye and 40 milliliters of yellow dye. If she mixes them, how many milliliters of orange dye will she have?

   70 milliliters

7. Terrance wants to buy a melon that weighs 3,950 grams. His bag can hold 4 kilograms without tearing. Can he carry the melon in his bag? Explain.

   Yes. Sample answer: The bag can hold 4,000 grams. The weight of the melon is less than how much the bag can hold.

8. A boy is 2 meters tall. His sister is one-half of his height. How many centimeters tall is his sister?

   100 centimeters

9. A jug can hold 1 liter of water. There are 820 milliliters of water in the jug. How many more milliliters of water is needed to fill the jug?

   180 milliliters

10. **Extend Your Thinking** Olivia can buy 1 kilogram of berries at the store for $10 or she can buy 100 grams for $0.50 at the farmer's market. Which is a better buy?

    The berries at the farmer's market; Sample answer: The store sells 1,000 grams for $10, which is the same as 100 grams for $1. This is more expensive than $0.50 for 100 grams.

U13-6	Solve More Problems That Involve Units of Measure	Question (1-6) Question (7-10)	Page 185 Page 186

Solve the problem.

1. Derinda's dog weighs 4 pounds. Elizabeth's dog weighs $5\frac{1}{4}$ pounds. What is the combined weight of the two dogs in ounces?

   148 ounces

2. Fasil makes 3 gallons of soup. He puts the soup in 1-quart containers. How many containers can he fill?

   12 containers

3. Jasmine has $3\frac{2}{3}$ yards of lace for 5 pillows. She uses 20 inches of lace for each pillow. How much lace does she have left?

   32 inches

4. Helen worked in the garden from 2:20 p.m. to 6:15 p.m. How many minutes did she work in the garden?

   235 minutes

5. A vine grows $\frac{1}{2}$ foot each week. How many inches does it grow in 6 weeks?

   36 inches

6. Hannah has 3 quarts of blueberries and 7 pints of raspberries. How many pints of berries does she have?

   13 pints

7. How much more does a $6\frac{1}{2}$-ton elephant weigh than an 8,000-pound hippopotamus?

   5,000 pounds

8. One soccer game ends at 10:15 a.m. and the next soccer game starts at 1:20 p.m. How many minutes are there between the games?

   185 minutes

9. Jess swam 400 yards in 14 minutes. Christina swam 960 feet in the same amount of time. Who swam faster? Explain.

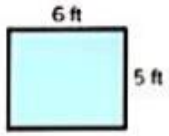
   Jess; Sample answer: Jess swam 1,200 feet in the same amount of time Christina swam 960 feet, so Jess swam faster.

10. **Extend Your Thinking** A concert is from 12:15 p.m. to 2:45 p.m. A movie lasts 2 hours and 8 minutes. The movie ends at 2:24 p.m. What time did the movie start? How much longer was the concert? Explain your thinking.

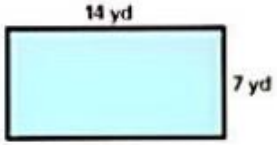
    12:16 p.m.; 22 minutes longer; Check students' explanations.

U13-7	Solve Problems Using a Perimeter Formula	Question (1-9) Question (10-12)	Page 189 Page 190

What is the missing value?

1. 

$P =$ 22 ft

2. 

$P =$ 42 yd

3. $l = 10$ miles, $w = 4$ miles

$P = 2 \times (10 +$ 4 $)$

$P =$ 28 miles

4. $l = 5$ km, $w = 2$ km

$P = (2 \times 5) + (2 \times$ 2 $)$

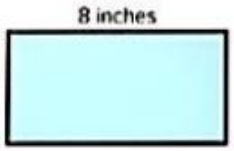
$P =$ 14 km

5. $l = 8$ m, $w = 5$ m

$P =$ 26 m

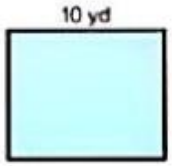
6. $l = 5$ units, $w = 5$ units

$P =$ 20 units

7. 

$P = 24$ inches

$w =$ 4 inches

8. 

$P = 36$ yd

$w =$ 8 yd

9. A rectangular playground has a length of 72 feet and a width of 36 feet. What is the perimeter?

216 feet

10. A rectangular piece of paper has a length of 8 inches. Its perimeter is 32 inches. What is the width of the paper?

8 inches; Sample answer: I know two sides add up to 16 inches, so the other two must also add up to 16 inches.

11. A rectangular tablecloth has a width of 60 inches. The length is $1\frac{1}{2}$ times the width. What is the perimeter? Justify your solution.

300 inches; Sample answer: The length is $60 \times 1\frac{1}{2}$, which is 90 inches. Then to find the perimeter, I doubled the length and the width and then added the sums.

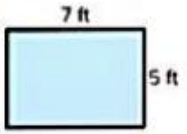
12. **STEM Connection** Sam designs a rectangular building with one side measuring 1,000 meters and a perimeter of 2,800 meters. What is the length of the other side? Explain.

400 meters; Sample answer: To find the unknown side length, I halved the perimeter to get 1,400 and then subtracted 1,000 to get 400.

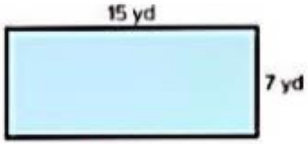
13. **Extend Your Thinking** If the length is double the width, what are three possible perimeters of a rectangle?

Sample answers: You could have $l = 8$ and $w = 4$ to have $P = 24$; $l = 6$ and $w = 3$ to have $P = 18$; $l = 10$ and $w = 5$ to have $P = 30$.

What is the area?

1. 

$A =$ 35 square ft

2. 

$A =$ 105 square yd

3. $l = 12$ meters, $w = 6$ meters

$A =$ 72 square meters

4. $l = 25$ km, $w = 4$ km

$A =$ 100 square km

5. $l = 8$ cm, $w = 5$ cm

$A =$ 40 square cm

6. $l = 22$ miles, $w = 5$ miles

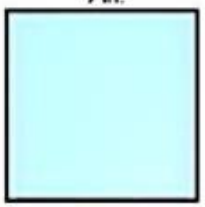
$A =$ 110 square miles

What is the missing value?

7. 

$A = 44$ square miles

$l =$ 11 miles

8. 

$A = 49$ square inches

$w =$ 7 inches

Solve the problem.

9. A rectangular garden has a width of 9 feet and an area of 144 square feet. What is the length of the garden?

16 feet

10. A square piece of cardboard has a side length of 18 inches. What is the area of the piece of cardboard? Show your work.

324 square inches; $A = 18 \times 18$; $A = 324$

11. A rectangular park has an area of 60 square miles. What are 3 possible length and width combinations? How did you find your answer?

Sample answer: 6 miles and 10 miles, 4 miles and 15 miles, 2 miles and 30 miles; I used 3 factor pairs of 60 to determine possible dimensions.

12. If the width of the blanket is half the length, what is the area of the blanket?

1,800 square inches; Sample answer: Half of 60 is 30 and 60 × 30 = 1,800.

13. **Error Analysis** The side lengths of a square are 6 units each. Marcus says the area of the rectangle is 24 square units. How can you explain his error?

Sample answer: Marcus found the perimeter. The area is the product of the length and width, which is 36 square units.

14. The area of a rectangular parking lot is 2,500 square feet. If the length of the parking lot is 100 feet, what is the width?

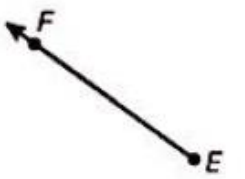
25 feet

15. **Extend Your Thinking** The perimeter of a rectangle is 24 feet. What could be the area? Find 3 possible answers.

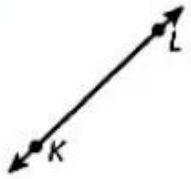
Sample answers: 20 square feet, 35 square feet, 36 square feet

U14-1	Understand Lines, Line Segments, and Rays	Question (1-9) Question (10-12)	Page 217 Page 258

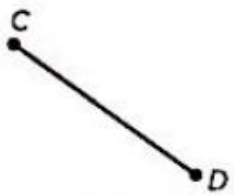
How can you name the figure? Write the name that best describes it.

1. 

Ray *EF*

2. 

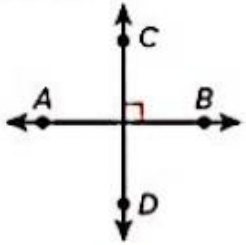
Line *KL*

3. 

Line segment *CD*

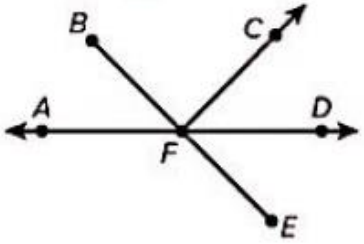
What name best describes the part of the figure containing the given points? Write the name of the figure.

4. Contains points *A* and *B*



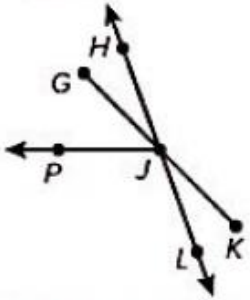
line

5. Contains points *C* and *F*



ray

6. Contains points *G* and *J*



line segment

Draw the figure.

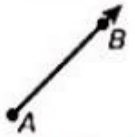
7. Line segment *UV* ($\overline{UV}$)

8. Ray *TS* ($\overrightarrow{TS}$)

9. Line *JK* ($\overleftrightarrow{JK}$)

Review

10. What name best describes the figure? (Lesson 14-1)



Ray *AB*

11. What name best describes the figure? (Lesson 14-1)

Line segment *SR* or *RS*

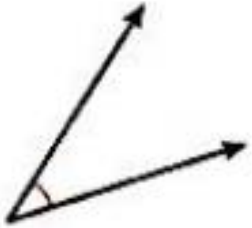
12. What name best describes the figure? (Lesson 14-1)

Line *MN* or *NM*

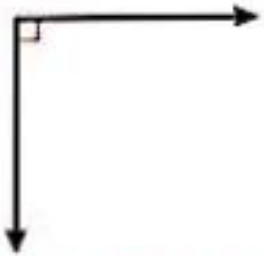
How can you classify the angle? Explain your thinking.

4. 

Obtuse; Sample answer: The angle measure is greater than the measure of a right angle.

5. 

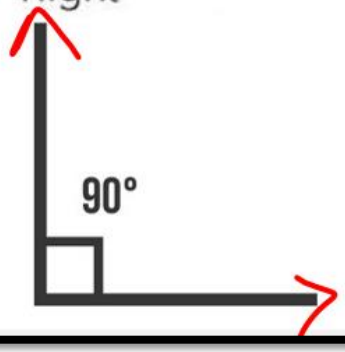
Acute; Sample answer: The angle measure is less than the measure of a right angle.

6. 

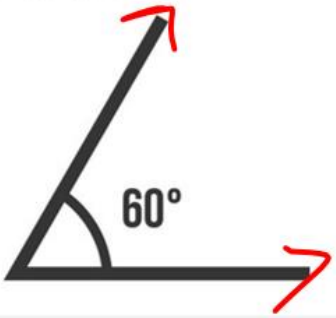
Right; Sample answer: The amount of rotation is equal to $\frac{1}{4}$ of a whole circle.

Draw the angle.

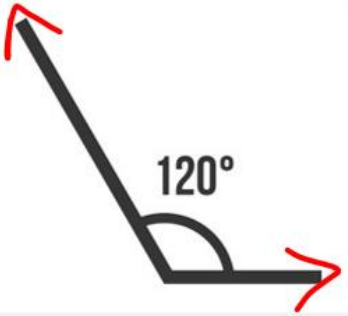
7. Right



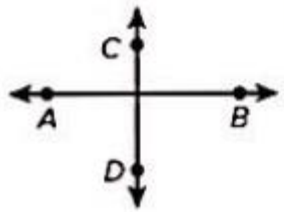
8. Acute



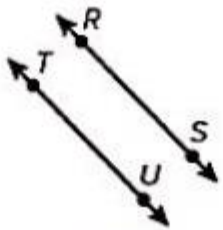
9. Obtuse



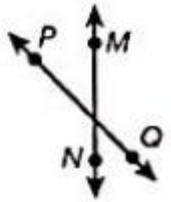
How can you describe the pair of lines shown? Label the pair of lines as parallel, perpendicular, or neither.

1. 

Perpendicular

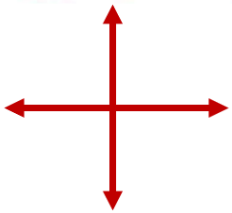
2. 

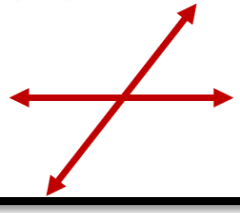
Parallel

3. 

Neither

Draw a pair of lines that match the description.

4. Perpendicular


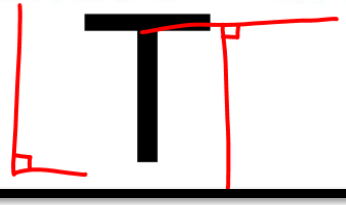
5. Intersecting, but not perpendicular.


6. Parallel


What capital letter of the alphabet matches the description?

7. Includes perpendicular and parallel lines

F

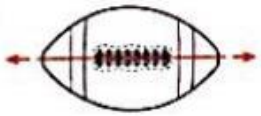
8. Includes perpendicular lines, but not parallel lines

T

9. Includes parallel lines, but not perpendicular lines

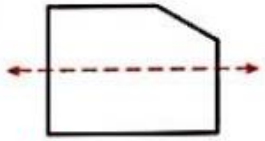
Z

U14-9	Understand Line Symmetry	Question (1-8) Question (9-11)	Page 251 Page 252

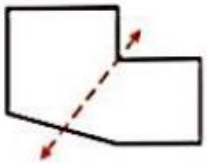
Does the dashed line show a line of symmetry?

1. 

Yes

2. 

No

3. 

No

4. 

Yes

5. Does a rectangle have a line of symmetry? Explain.

Yes. Sample answer: You can fold a rectangle to make matching parts horizontally or vertically.

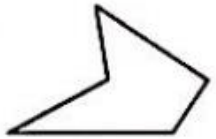
6. Does a pentagon with equal side lengths have a line of symmetry? Explain.

Yes. Sample answer: You can fold a regular pentagon to make matching parts in five different ways.

Is the figure symmetrical? How do you know?

7. 

Yes. Sample answer: I can fold the figure in half along its length and the halves will match.

8. 

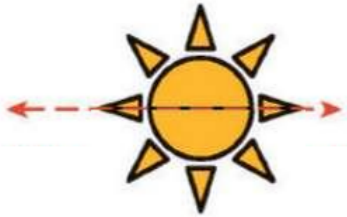
No. Sample answer: There is no place where I can fold the figure and get matching halves.

9. How many lines of symmetry are shown on the equilateral triangle?

3

Complete the figure to make a symmetrical figure.

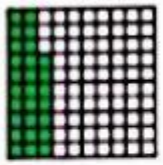
10. 

11. 

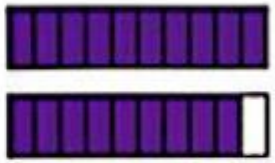
Part 2 type questions	درجة ألسئلة الموضوعية FRQ- 5-10 marks per question	عدد ألسئلة الموضوعية Number of questions: 5	40 *Marks*

U12-2	Understand Decimal Notation	Question (1-6) Question (12,16-18)	Page 137 Page 154

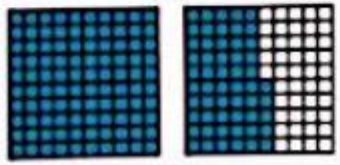
What number does the model represent? Write it as a fraction or mixed number and as a decimal.

1. 

$\frac{27}{100}$; 0.27

2. 

$1\frac{9}{10}$ or $\frac{19}{10}$; 1.9

3. 

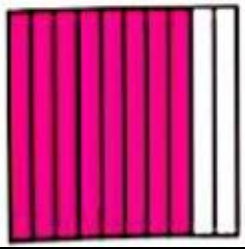
$1\frac{55}{100}$ or $\frac{155}{100}$; 1.55

4. 

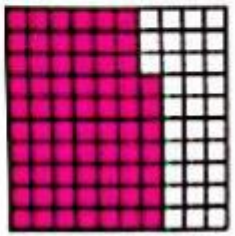
$2\frac{5}{10}$ or $\frac{25}{10}$; 2.5

How can you shade the grid to represent the decimal?

5. 0.8



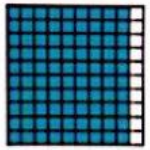
6. 0.67



12. Jennifer walked 0.83 miles on the treadmill. What fraction represents the distance she walked? (Lesson 12-2)

$\frac{83}{100}$

16. What are two fractions and two decimals that can be represented by the following decimal grid? (Lesson 12-2)



$\frac{9}{10}$; $\frac{90}{100}$; 0.9; 0.90

17. Which numbers are equivalent to the fraction $\frac{80}{100}$? Choose all that apply. (Lesson 12-2)

A. $\frac{8}{100}$ (B.) $\frac{8}{10}$

(C.) 0.8 D. 0.08

(E.) 0.80

18. What fraction is equivalent to the decimal 0.41? (Lesson 12-2)

$\frac{41}{100}$

What decimal represents the total amount of money?

1. 

$ 1.24

2. 

$ 5.33

3. 

$ 7.46

4. 

$ 2.12

5. Marnie has the amount shown. Her mom gives her a one-dollar bill and 2 dimes. How much money does Marnie have now?

$6.82

6. John has the amount shown. He spends $1.25. How much money does John have now?

$1.23

7. Sergio wants to buy a snack for $1.75. He has a one-dollar bill, 6 dimes, and 7 pennies. Does he have enough money to buy the snack? Explain.

No; Sergio has $1.67 and $1.67 < $1.75.

8. Roger buys 2 pieces of pizza. He hands the cashier $2.00. What coins could Roger receive back in change?

Sample answer: 4 dimes

$0.80 for 1

9. Sally has 9 one-dollar bills, 12 dimes, and 5 pennies. Earl has a ten-dollar bill, 1 dime, and 5 pennies. Who has more money? Justify your answer.

Sally; Sample answer: Sally has $10.25. Earl has $10.15. $10.25 > $10.15

10. Sarah spent exactly $8.00 on school supplies. What supplies could Sarah have bought?

Sample answer: 1 calculator, 4 pencils, 1 notebook.

Supply	Price
pencil	$0.50
notebook	$1.00
folder	$0.75
calculator	$5.00

11. Mia has 4 quarters and some dimes. She has $1.80. How many dimes does Mia have? Justify your answer.

8 dimes; Sample answer: The value of 4 quarters is $1.00. The value of 8 dimes is $0.80. The total value is $1.80.

U13-9	Solve Problems Involving Perimeter and Area	Question (1-6) Question (7-10)	Page 197 Page 198

What is the unknown measurement?

1. A billboard has the following measurements.

a. What is the length of the billboard?

$48 = l \times 4$

$l =$ 12 yd

b. What is the perimeter?

$P = 2 \times (\_12\_ + 4)$

$P = 2 \times$ 16

$P =$ 32 yd

2. A lap pool has the following measurements.

a. What is the width of the lap pool?

$300 = 30 \times w$

$w =$ 10 ft

b. What is the perimeter?

$P = 2 \times (30 +$ 10 $)$

$P = 2 \times$ 40

$P =$ 80 ft

3. A rectangular koi pond has an area of 12 square feet and a width of 2 feet. What is the length and perimeter?

$l =$ 6 ft $P =$ 16 ft

4. A rectangular rug has an area of 15 square feet and a width of 3 feet. What is the length and perimeter?

$l =$ 5 ft $P =$ 16 ft

5. A rectangular greenhouse has a perimeter of 40 feet and length of 10 feet. What is the area?

$A =$ 100 sq ft

6. A square frame has an area of 400 square inches. What are the side lengths?

$l =$ 20 in.

7. A rectangular park has an area of 12 square miles. What are 3 possible perimeters in miles? Justify your solutions.

14 miles, 16 miles, and 26 miles; Sample answer: I used 3 factor pairs of 12: 3 and 4, 2 and 6, and 1 and 12, and then found the perimeter using each factor pair.

8. A gardener has 60 inches of edging material to surround a rectangular flowerbed. What is the greatest possible area of the flowerbed? Justify your solution.

225 square inches; Sample answer: I found half the amount of border material, which is 30 inches. Then I found pairs of addends that equal 30. Then I multiplied to find the products of the addends.

9. **STEM Connection** Sam designs a rectangular building. The area is 360,000 square feet. The length of the building is 900 feet. What are 3 possible widths? Explain. **Sample answer: 400 feet; 300 feet; 200 feet. The width must be less than 400 feet because the product of 900 and 400 is 360,000.**

10. **Extend Your Thinking** If the length and width of a rectangle are doubled and then doubled again, how does the area and perimeter change each time?

Sample answer: The area increases by 4 times each time and the perimeter doubles each time.

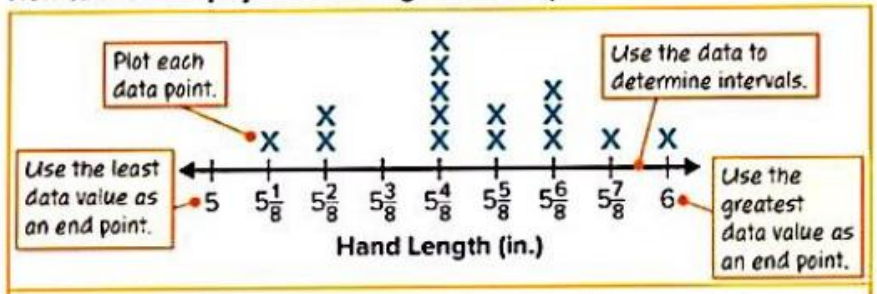
U13-10	Display and Interpret Data on a Line Plot	Learn + work together Question (1-6) Question (7-9)	Page 200 Page 201 Page 202

Learn

Kade measured the hand lengths of her class to the nearest eighth inch.

Length (in.)	$5\frac{6}{8}$	$5\frac{1}{8}$	$5\frac{2}{8}$	$5\frac{4}{8}$	5	$5\frac{5}{8}$	$5\frac{7}{8}$	$5\frac{3}{8}$	6
Count	3	1	2	5	0	2	1	0	1

How can Kade display the hand lengths in a line plot?



You can interpret data displayed on the line plot and draw conclusions.

- The difference between the longest and shortest hand length is $\frac{7}{8}$ inch: $6 - 5\frac{1}{8} = \frac{7}{8}$.
- The most common hand length was $5\frac{4}{8}$ inches.
- No one had a hand length of 5 inches or $5\frac{3}{8}$ inches.

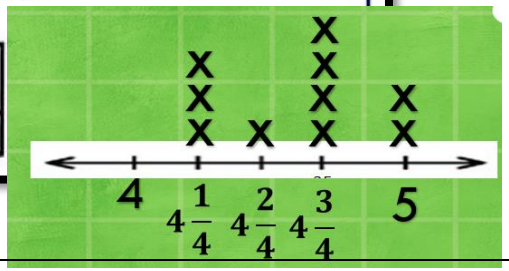
Math is... Thinking
How does a line plot help you analyze data?

You can use a line plot to display measurement data. You can interpret measurement data displayed on the line plot to answer questions.

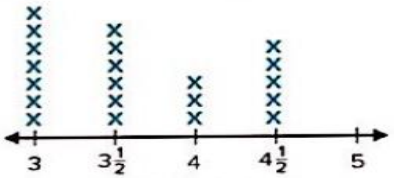
Work Together

The table shows the lengths of a set of pencils.
How can you display the data in a line plot?

Length (in.)	$4\frac{3}{4}$	5	$4\frac{1}{4}$	$4\frac{2}{4}$
Count	4	2	3	1



Use the line plot for exercises 1–4.

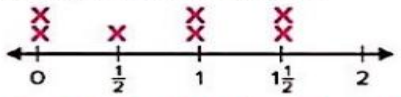


Mr. Cobey's Class
Long Jump Distances (ft)

1. What was the greatest distance jumped?
   $4\frac{1}{2}$ ft
2. How many students jumped 4 feet or greater?
   8 students
3. How many students jumped $4\frac{1}{2}$ feet?
   5 students
4. How many students jumped $3\frac{1}{2}$ feet?
   6 students

Use the data for exercises 5 and 6.

5. The table shows the time Jackson spent practicing the saxophone each day. Display the data on a line plot.



Saxophone Practice (hours)

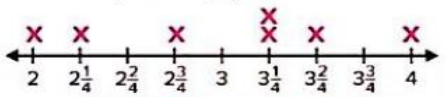
Saxophone Practice (hours)	
Monday	$1\frac{1}{2}$
Tuesday	0
Wednesday	$\frac{1}{2}$
Thursday	1
Friday	1
Saturday	0
Sunday	$1\frac{1}{2}$

6. How many hours did Jackson practice in all?
   $5\frac{1}{2}$ hours

The table shows the distances Kireka's family hiked each day during a family vacation. Use the data in the table for exercises 7–10.

Distance Hiked (miles)	
Monday	$3\frac{1}{4}$
Tuesday	2
Wednesday	$3\frac{2}{4}$
Thursday	$2\frac{1}{4}$
Friday	4
Saturday	$2\frac{3}{4}$
Sunday	$3\frac{1}{4}$

7. Draw a line plot to display the data.



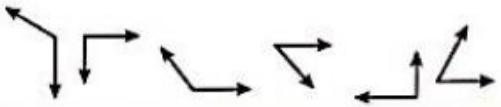
Distance Hiked (miles)

8. Which distance was most frequently hiked?
   $3\frac{1}{4}$ miles
9. What is the difference between the longest and shortest distance Kireka's family hiked?
   2 miles

U14-2	a) Classify Angles	Learn Question (1-3)	Page 220 Page 221

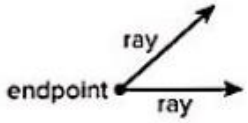
Learn

Ling is sorting some shapes.

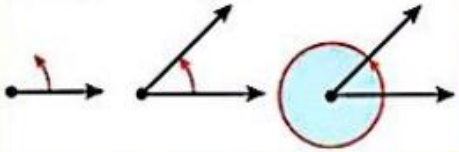


How can Ling sort the shapes?

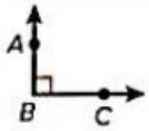
An **angle** is formed when two rays have the same endpoint.



Angles are measured by the amount of rotation, or turning, along a circle from one ray of the angle to the other.

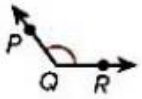


$\angle ABC$ is a right angle.



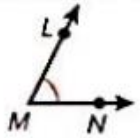
In a **right angle**, the amount of rotation is $\frac{1}{4}$ of a whole circle.

$\angle PQR$ is an obtuse angle.



An **obtuse angle** has a measure that is greater than the measure of a right angle.

$\angle LMN$ is an acute angle.



An **acute angle** has a measure that is less than the measure of a right angle.

Ling can group the angles by their properties.

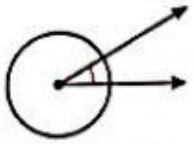
Math is... Choosing Tools

How do the drawings help you understand the concept of an angle?

An angle is formed when two rays share a common endpoint.

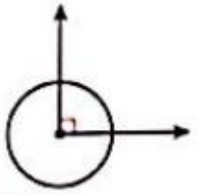
How can you describe the amount of rotation?

1.



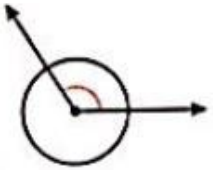
Sample answer: The amount of rotation is less than $\frac{1}{4}$ of a whole circle.

2.



Sample answer: The amount of rotation is equal to $\frac{1}{4}$ of a whole circle.

3.

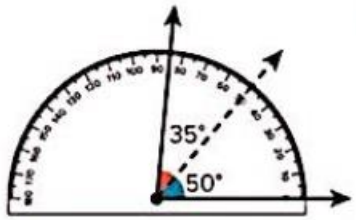


Sample answer: The amount of rotation is greater than $\frac{1}{4}$ of a whole circle.

U14-5	b) Add and Subtract Angle Measures	Learn Question (1-5) Question (6-9)	Page 232 Page 233 Page 234

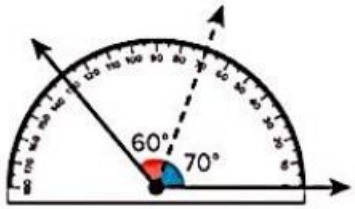
What is the sum of the two angles?

1.



85°

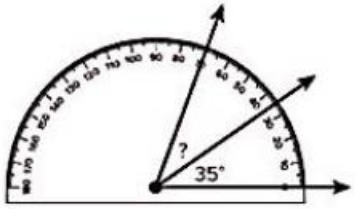
2.



130°

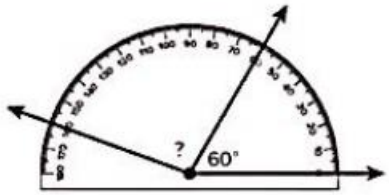
What is the measure of the unknown angle?

3.



35°

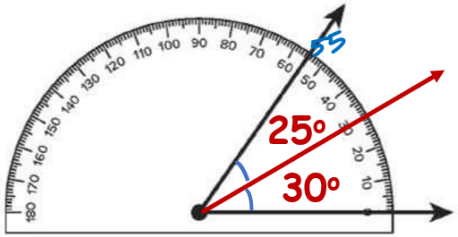
4.



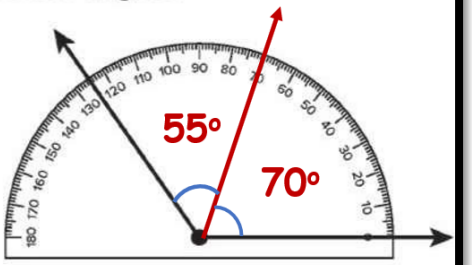
100°

How can the angle be partitioned into two smaller angles? Write possible angle measurements for the two smaller angles.

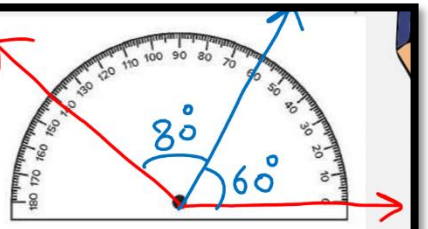
6.



7.



5. Gabriela drew a ray inside an obtuse angle to partition the angle into two acute angles. What is a possible measure of the obtuse angle and the two acute angles? Use the protractor to draw the angles.



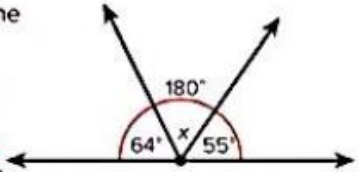
obtuse angle = 140°

acute angle = 60°, 80°

8. **Error Analysis** Andy wants to cut the orange slice into two smaller pieces. He says that 45° and 55° are possible angle measurements. Do you agree with Andy? Explain why or why not.

I do not agree with Andy. Sample answer: Andy is thinking of angle measures that add to 100°. He needs to think of angle measures that add to 110°.

9. **Extend Your Thinking** How can you find the measure of the unknown angle?



$x = 61°$; Sample answer: I know that the total angle represents half turn of a circle which is 180°. So, $64° + x + 55° = 180°$; $119° + x = 180°$.