Grade 3 EoT 1 Exam Coverage

Term 1

2023-2024

Math Exam Date : 04/12/2023

Marks : 100

١

Represent 4-digit numbers in expanded form, word form, and standard form using an understanding of place value
4 Marks

مثال (1-2)

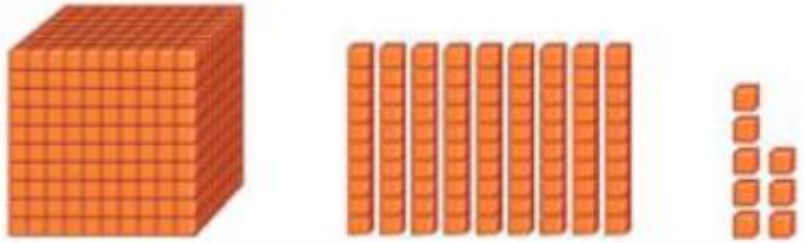
صفحة 35

What number is represented by the base-ten blocks?

1.

thousands	hundreds	tens	ones

2.

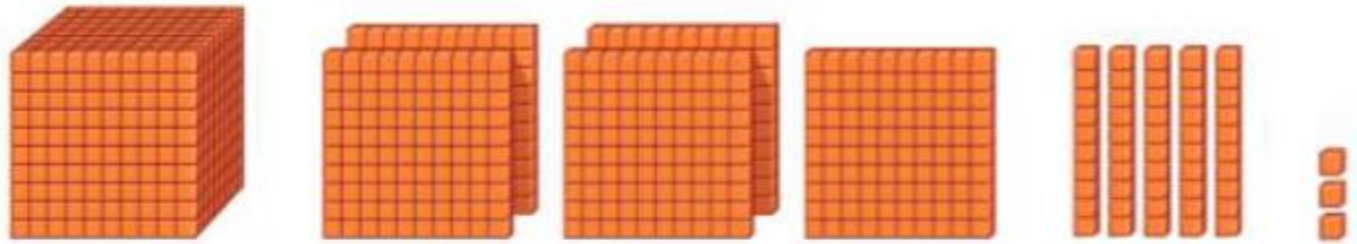


thousands	hundreds	tens	ones

(8) مثال
36 صفحة

How can you represent the number shown in standard form and expanded form?

8.



2

Round numbers to the nearest 10 or nearest 100.(4 marks)

مثال (1-8)

صفحة 39

On My Own

MATH REPLAY | GO ONLINE

Name _____

Use a number line to round.

1. Round 27 to the nearest 10.
   30

2. Round 896 to the nearest 10.
   900

Use place value to round.

3. Round 48 to the nearest 10.
   50

4. Round 273 to the nearest 10.
   270

Use a number line to round. Show your work.

5. Round 436 to the nearest 100.

   See students' drawings.

   436 rounded to the nearest 100 is **400**.

6. Round 672 to the nearest 100.

   See students' drawings.

   672 rounded to the nearest 100 is **700**.

7. How can the number 78 round to 80 and 100? Explain.

   Sample answer: 78 rounded to the nearest 10 is 80 and 78 rounded to the nearest 100 is 100.

8. A number rounded to the nearest 10 is 240. What number could it be? **Sample answer: 235**

2

Round numbers to the nearest 10 or nearest 100

مثال (9-11)

صفحة 40

9. How can you use the number line to show why 678 rounded to the nearest 100 is 700? Explain your reasoning.

10. **Error Analysis** Tess says that 315 rounded to the nearest 10 is 310. Do you agree? Explain your reasoning.

11. Jack is making a fruit salad. He puts in 9 strawberries, 25 orange wedges, 19 kiwi slices, 27 blueberries, 16 grapes, and 21 raspberries. Which fruits does he use about 20 of?

3

Use round the numbers to estimate a sum or difference and use compatible numbers to estimate a sum or difference.
(7 marks)

مثال (9-12)

46 صفحة

9. The Comic Book Shack displays 318 comic books near the front door and keeps 502 comic books in the storage room. How can you use compatible numbers to find about how many comic books are in the store?

10. **STEM Connection** Saffron's bakery needs to decorate 355 cupcakes for an event. It has decorated 223 so far. How can she determine about how many more cupcakes they need to decorate?

11. Melinda estimates she traveled 830 miles last Monday and Tuesday. She traveled 412 miles on Tuesday. About how many miles could she have traveled on Monday?

12. **Extend Your Thinking** Jason has 744 flyers to deliver. If he has delivered 62 flyers at each of his last 2 stops, about how many flyers does he have left to deliver?

مثال (10)

84 صفحة

7 Marks

10. Sasha spent 284 minutes swimming the first week and 247 minutes the second week. What is an estimate of the total time Sasha spent swimming? Explain your reasoning. (Lesson 2-3)

4

Use partial sums to add 3-digit numbers.

(4 marks)

مثال (1-7)

صفحة 57

How can you decompose each addend? What is the sum?

1. $247 + 564 =$ _____

2. $\begin{array}{r} 815 \\ +\ 148 \\ \hline \end{array}$

3. $\begin{array}{r} 729 \\ +148 \\ \hline \end{array}$

4. $327 + 176 =$ _____

5. Whitney uses partial sums to add. Look at her work to determine which two numbers were in her original equation.

_____ + _____ = 598

200 + 300 = 500

10 + 80 = 90

6 + 2 = 8

500 + 90 + 8 = 598

6. How can you determine which addends are in the original equation by looking at the partial products?

7. Tyrone spent 172 days in school last year. If he attends school the same number of days next year, how many days will he spend in school in two years?

مثال (8-9)

صفحة 58

How can you find the sums in a different way?

8.

$$475 + 325 = 800$$
$$400 + 300 = 700$$
$$70 + 20 = 90$$
$$5 + 5 = 10$$
$$700 + 90 + 10 = 800$$

9.

$$\begin{array}{r} 238 \\ +271 \\ \hline 400 \\ 100 \\ +\ \ 9 \\ \hline 509 \end{array}$$

5

Use related addition equation to find the difference.(4 marks)

مثال (1-5)

صفحة 69

How can you write a related addition equation for the subtraction equation?

1. $635 - 202 = ?$ _____

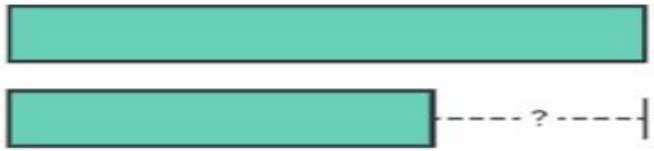
2. $400 - 151 = ?$ _____

3. $825 - 134 = ?$ _____

4. **Error Analysis** Jayla knows she can use addition to subtract. She adds $301 + 447$ to find the difference of $447 - 301$. How can you help her understand how to use this strategy?

5. On Monday, 549 people visited the aquarium. On Friday, 823 people visited the aquarium. How many more people visited the aquarium on Friday?

   a. How can you fill in the bar diagram to represent the problem?



   b. How can you write an equation with an unknown to represent the bar diagram?

مثال (6-9)

صفحة 70

How can you use the relationship between addition and subtraction to find the difference?

6. 480 – 318 = _____

7. _____ = 300 – 179

8. 705 – 239 = _____

9. 212 – 135 = _____

6

Explain different strategies to add 3-digit numbers. (4 marks)

مثال (1-4)

صفحة 73

How can you solve the equation?

1. $437 + 269 =$ _____

2. _____ $= 123 + 443$

3. _____ $= 367 + 512$

4. $791 + 111 =$ _____

مثال (8-9)

74 صفحة

How can you solve the equation? Explain your addition strategy.

8. 458 + 139 = _____

9. 719 + 234 = _____

7

Explain the meaning of multiplication as Equal groups. (4 marks)

مثال (1-8)

صفحة 93

How many? Fill in the blanks.

1. 

3 equal groups of 4

2. 

2 equal groups of 5

How can you represent the equal groups?

3. 2 equal groups of 7

Sample answer: A drawing of 2 circles with 7 objects in each circle.

4. 4 equal groups of 5

Sample answer: A drawing of 4 circles with 5 objects in each circle.

How many objects?

5. 4 equal groups of 4 pencils

$4 \times 4 =$ 16

16 pencils

6. 3 equal groups of 2 mittens

$3 \times 2 =$ 6

6 mittens

What equation represents the equal groups?

7. 

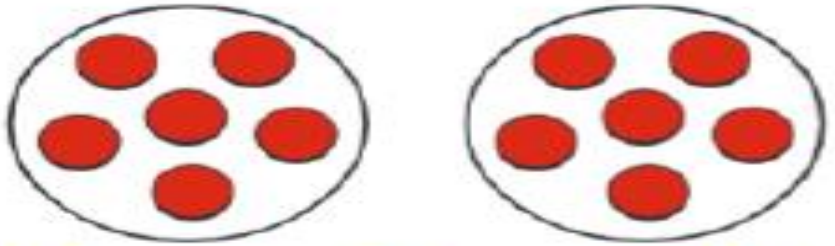
$2 \times 3 = 6$

8. 

$4 \times 2 = 8$

(7) مثال
122 صفحة

7. How can you represent these groups of counters? (Lesson 3-1)



2 × 6 = 12

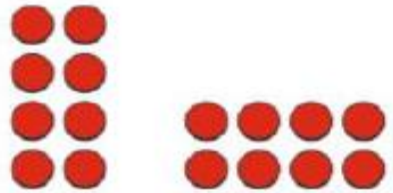
8

Demonstrate an understanding of the commutative property of Multiplication.
(4 marks)

مثال (1-6)

صفحة 103

1. What two multiplication equations represent these arrays?



_____ _____

2. Sam says that 6×2 and 2×6 have the same product. Do you agree with Sam? Explain why or why not.

What makes the equation true? Fill in the blank.

3. $5 \times 6 = 6 \times$ _____

4. $9 \times 0 =$ _____ $\times 9$

5. Use representations to show 2×3 is equal to 3×2.

6. Use representations to show 1×4 is equal to 4×1.

(8) مثال
122 صفحة

8. How can you complete the equations? (Lesson 3-3)

$5 \times \underline{7} = 35$

$7 \times \underline{5} = 35$

9

Represent division with equal grouping,
(4 marks)

مثال (1-6)

صفحة 111

How can you draw a representation and answer the question?

1. 6 dogs
   2 dogs at each water bowl
   How many water bowls?

   $6 \div 2 = 3$

2. 8 balloons
   2 balloons for each child
   How many children?

   $8 \div 2 = 4$

3. 10 plates
   5 plates on each table
   How many tables?

   $10 \div 5 = 2$

4. 12 beads
   4 beads for each bracelet
   How many bracelets?

   $12 \div 4 = 3$

Which division equation describes the representation?

5. 

   A. $15 \div 3 = 5$
   B. $15 = 3 \div 3$
   C. $15 \div 5 = 5$
   D. $12 \div 5 = 5$

6. 

   A. $12 \div 4 = 4$
   B. $12 = 3 \div 4$
   C. $12 \div 5 = 4$
   D. $12 \div 3 = 4$

مثال (13,15)
صفحة 123

13. Mason will place 18 pennies into jars. He will place 9 pennies in each jar.

What equation represents the problem? (Lesson 3-5)

18 ÷ 9 = 2

15. Victor has 16 ice cubes. He wants to place 4 ice cubes in each glass of water. How many glasses will he need? (Lesson 3-5)

A. 4

16 ÷ 4 = 4

B. 5

C. 6

D. 7

10

Use representations to determine the unknown in a multiplication or division

equation.

(4 marks)

مثال (1-6)

صفحة 119

Use the representation. What is the unknown?

1. $4 \times \_\_\_\_\_ = 12$

2. $\_\_\_\_\_ \times 7 = 21$

3. Robert has 16 pencils. He puts an equal number of pencils in 2 boxes. How many pencils does he put in each box?

$16 \div 2 =$ 8

$2 \times \_\_\_\_\_ = 16$

How can you draw a representation to find the unknown?

4. $4 \div 2 = \_\_\_\_\_$

5. $6 \times \_\_\_\_\_ = 18$

6. $18 \div 2 = \_\_\_\_\_$

(9) مثال
122 صفحة

9. What number makes the equation true? (Lesson 3-7)

$2 \times ? = 16$

A. 7

B. 8

C. 9

D. 10

11

Describe and use patterns to multiply by 2

(4 marks)

مثال (4-10)

صفحة 131

4. Draw a line to connect the related equations.

$2 \times ? = 4$	$7 + 7 = ?$
$2 \times ? = 10$	$2 + 2 = ?$
$2 \times ? = 14$	$5 + 5 = ?$

How can you complete the equation?

5. $2 \times 9 =$ 18

6. 20 $= 2 \times 10$

7. $6 \times 2 =$ 12

8. $8 =$ 4 $\times 2$

9. 3 $\times 2 = 6$

10. $7 \times 2 =$ 14

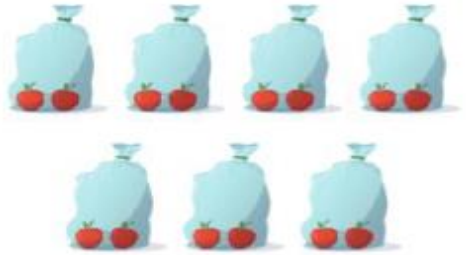
مثال (1,2)
صفحة 137,138

Consider the equation $2 \times 7 = 14$.

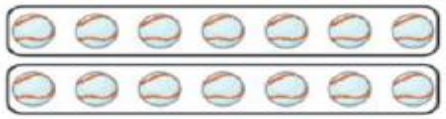
1. Circle *all* drawings that show 2 groups of 7.

a.

b.



c.



d.

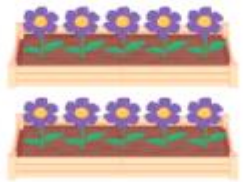
Consider the equation $5 \times 2 = 10$.

2. Circle *all* drawings that show 5 groups of 2.

a.

b.

c.



d.

12

Describe and use patterns to multiply by 5.

(4 marks)

مثال (12-15)

صفحة 136

12. Mary Lou does 5 jumping jacks. If she does the same number of jumping jacks for 4 days in a row, how many jumping jacks does Mary Lou do?

5 x 4 = 20 jumping jacks

13. Sara puts the same number of fish shown in each of 5 tanks. How many fish does she have?

7 fish x 5 = 35 fish

14. Which equations are true? Choose all that apply.

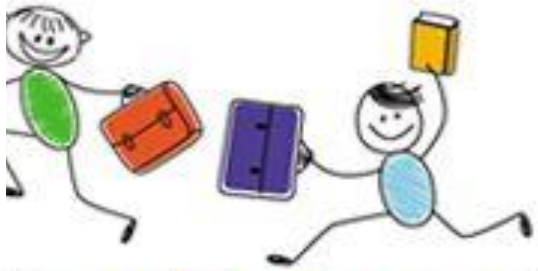
A. $5 \times 3 = 3 + 3 + 3$

B. $3 \times 5 = 5 + 5 + 5$

C. $5 \times 2 = 5 + 2$

D. $5 \times 4 = 4 + 4 + 4 + 4 + 4$

15. Extend Your Thinking Lee has 32 books. He says he can make 5 stacks of books with the same number of books in each stack. Is he correct? Explain.



(9) مثال
156 صفحة

9. Each book at the book fair was on sale for $5. Dvora bought 9 books. How much did she spend on books at the book fair? (Lesson 4-2)

A. $30

B. $35

C. $40

D. $45

13

Describe and use patterns to multiply by 10.

(4 marks)

مثال (5-10)

صفحة 141

How can you complete the equation?

5. $5 \times 10 = \underline{50}$

6. $10 \times \underline{7} = 70$

7. $\underline{60} = 6 \times 10$

8. $\underline{20} = 10 \times 2$

9. $\underline{9} \times 10 = 90$

10. $8 \times 10 = \underline{80}$

مثال (13-14)
صفحة 142

11. There are 3 logs in the pond. There are 10 frogs on each log. How many frogs are there?

10 x 3 = 30 frogs

12. Larry walks 5 miles in a week. He walks the same number of miles for 10 weeks. How many miles does Larry walk?

10 x 5 = 50 miles

13. Which equations are true? Circle all that are correct.

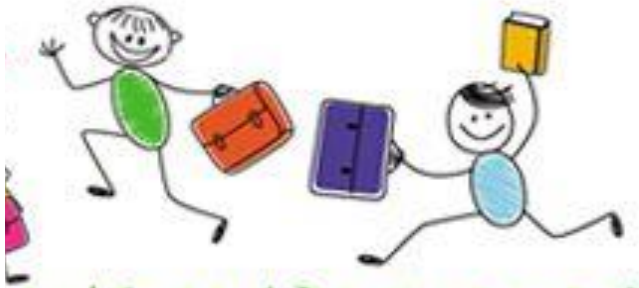
A. $5 \times 8 = 4 \times 10$

B. $3 \times 5 = 3 \times 10$

C. $10 + 10 = 10 \times 10$

D. $10 + 10 = 2 \times 10$

14. Extend Your Thinking How does knowing 5×4 help you remember 10×4?



14

Represent a problem with equal groups and an equation. Use equal groups to solve an equation. (4 marks)

مثال (1-4)

صفحة 153

1. Eight friends share 40 apple slices. If each friend receives the same amount of apple slices, how many does each person receive?

   $8 \times ? = 40, \quad 40 \div 8 = ?$

2. Bobbie, Wendy, and Winston spent a total of $21 to go to the movies. If it cost each person the same amount, how much did each person spend?

   $3 \times ? = 21, \quad 21 \div 3 = ?$

3. Jermaine ran 56 minutes over seven days. If he ran the same amount of time each day, how many minutes did he run each day?

   $7 \times ? = 56, \quad 56 \div 7 = ?$

4. June earns $25 for working five hours. If she earns the same amount each hour, how much does she get paid per hour?

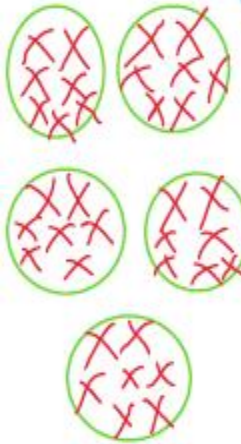
   $5 \times ? = 25, \quad 25 \div 5 = ?$

مثال (9-11)
صفحة 154

9. Sam bought tickets to the county fair. How much did each ticket cost if each costs the same amount?

$36 \div 6 = \$6$

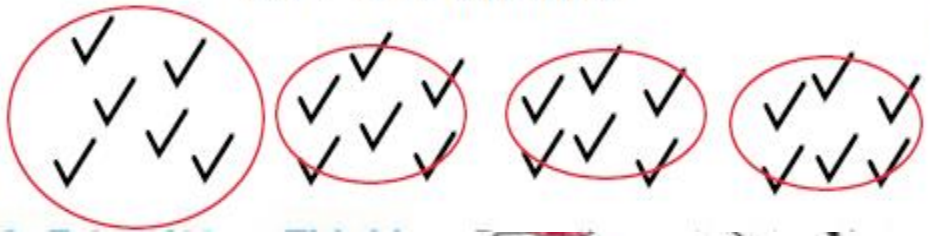
10. Carlos spends 35 minutes on homework. He spends the same amount of time on each of his 5 assignments. How long does he spend on each assignment?



$35 \div 5 = 7$ minutes

11. **STEM Connection** It takes Grace 24 hours to write a computer program for 4 robots. If each program takes the same amount of time to write, how long does it take Grace to write one program? Explain.

$24 \div 4 = 6$ hours



15

Apply the properties of multiplication to recall 3s facts. (4 marks)

مثال (1-11)

صفحة 169

What number completes the equation?

1. $3 \times 4 =$ 12
2. $3 \times$ 6 $= 6 \times 3$
3. $24 = 3 \times$ 8
4. $3 \times$ 2 $= 6$
5. $3 \times 10 = 10 \times$ 3
6. $0 \times 3 =$ 0
7. $3 \times$ 1 $= 3$
8. 27 $= 3 \times 9$

How can you decompose a factor to solve the problem? Show your thinking.

9. Wyatt saves $5 each week. How much money will he have after 3 weeks?

3 x 5 = $ 15

10. Otto has 7 packs of 3 erasers. How many erasers does Otto have in all?

3 x 7 = 21 erasers

11. Caitlyn walks dogs 3 times a day. She walks dogs 6 days in a row. How many walks does she take during those 6 days?

3 x 6 = 18 walks

مثال (13,17)
صفحة 195

13. Which equation represents how to find the product for this array? (Lesson 5-2)

A. $3 \times 9 = 3 \times 5 + 3 \times 4$

B. $3 \times 9 = 3 \times 3 + 5 \times 6$

C. $3 \times 9 = 3 \times 5 + 5 \times 5$

D. $3 \times 9 = 3 \times 3 + 3 \times 3$

17. Find the unknown. (Lesson 5-2)

$7 \times ? = 21$

A. 3 **B.** 4

C. 5 **D.** 6

Apply the properties of multiplication to recall 6s facts. (4 marks)

مثال (1-7)

صفحة 177

How can you use the 3s facts to find the unknown?

Page 177

1. $3 \times 9 = 27$ $\quad 6 \times 9 =$ 54
2. $15 = 3 \times 5$ $\quad$ 30 $= 5 \times 6$
3. $24 = 8 \times 3$ $\quad 8 \times 6=$ 48
4. $6 \times 3 = 18$ $\quad 6 \times$ 6 $= 36$

How can you decompose to solve the problem?
Show your thinking.

5. Paul packs 8 boxes of snack bags for a school picnic. There are 6 snack bags in each box. How many snack bags does Paul pack in all?

   6 x 8 = 48

6. Roger places 5 basketballs in each crate. There are 6 crates. How many basketballs does Roger place in crates?

   6 x 5 = 30

7. **Error Analysis** Brittany places action figures on 7 shelves with 6 on each shelf. She decomposes to find the total number of action figures. Do you agree with her work shown below? Explain.

   $7 \times 6 = 4 \times 3 + 3 \times 3$

   $7 \times 6 = 12 + 9$

   $7 \times 6 = 21$

مثال (8-17)

178 صفحة

What completes the equation?

8. $6 \times 7 = \underline{42}$

9. $30 = \underline{5} \times 6$

10. $12 = \underline{6} \times 2$

11. $4 \times 6 = \underline{6} \times 4$

12. $9 \times 6 = \underline{54}$

13. $\underline{60} = 6 \times 10$

14. $1 \times 6 = 6 \times \underline{1}$

15. $6 \times 8 = \underline{48}$

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16. Which are equal to 6×5?
Choose all that apply.

- ✓ A. 5×6
- ✓ B. $3 \times 5 + 3 \times 5$
- ✗ C. $5 \times 4 + 1 \times 1$
- ✗ D. 6×3
- ✓ E. $5 \times 5 + 1 \times 5$
- ✗ F. $3 \times 3 + 4 \times 1$

17. Extend Your Thinking How can you explain why a number that is a product of 6 is also a product of 3?

17

Explain different strategies to subtract 3 –digit numbers (7 – 9 marks)

مثال (1-7)

صفحة 77

How can you solve each equation?

1. $779 - 363 =$ _____

2. $562 - 295 =$ _____

3. $934 - 874 =$ _____

4. $134 - 68 =$ _____

5. At the airport baggage claim, there are 497 passengers and 632 pieces of luggage. How many more pieces of luggage are there than passengers?

6. Mark and Heidi are asked to solve $171 - 136$. Their work is shown. Which strategy would you choose to solve the problem?

Mark	Heidi
$170 - 135 = ?$	$136 + ? = 171$

7. Cadence earned 299 points in her online game. This was 102 points greater than her last score. Marco earned 414 points. How many more points did Marco earn?

18

Write and solve the equations to represent a two-step problem.Use letters for unknowns (7 – 9 marks)

مثال (5-7)

صفحة 81

Represent and solve the problem. Use letters for the unknowns.

5. Sam and Ben take turns driving. They traveled 417 miles in May and 454 miles in June. If Sam drove 502 of the miles, how many miles did Ben drive?

6. Jaya earned $187 babysitting. She bought a wireless speaker for $129 and a carrying case for $26. How much money does she have left?

7. Judy has 323 beads. Sarah has 142 more beads than Judy. How many beads do they have together?

(19) مثال
85 صفحة

19. Enrique read 249 pages of his book in June and 227 pages of his book in July. The book has a total of 638 pages and Enrique wants to know how many pages he has left to read. (Lesson 2-12)

Which set of equations could be used to solve the problem?

A. $227 + 249 = 476$
$638 - 227 = 411$

B. $249 + 277 = 476$
$638 - 476 = 162$

C. $638 - 249 = 389$
$389 + 227 = 616$

D. $638 - 227 = 411$
$411 + 249 = 660$

Use arrays to represent multiplication
(7 – 9 marks)

مثال (1-6)

صفحة 97

How many? Complete the equations.

1.

$4 + 4 + 4 =$ _____

$3 \times 4 =$ _____

2.

$5 + 5 =$ _____

$2 \times 5 =$ _____

Write one addition equation. Write one multiplication equation.

3.

_____

_____

4.

_____

_____

How can you draw an array to represent the equation?

5. $4 \times 4 = 16$

6. $3 \times 5 = 15$

مثال (7-10)
صفحة 98

7. Mauricio planted a garden with 5 rows and 7 plants in each row. How can you represent the total number of plants in his garden? Choose all that apply.

   A. $7 + 7 + 7 + 7 + 7$ **B.** $5 + 5 + 5 + 5 + 5$

   C. 5×7 **D.** 7×7

8. Hyun has a carton of eggs. There are 2 rows of eggs with 6 eggs in each row.

   a. Draw an array to represent the problem.

   b. Write an equation to represent the problem.

   c. How many eggs does Hyun have?

   _____ eggs

9. **Error Analysis** Frankie says she can add 3 + 5 to find the total number of ice cubes in the tray. Do you agree? Explain.

10. **Extend Your Thinking** Mrs. Ruiz is placing 18 chairs in equal rows. What multiplication equations can represent different arrays she can create with the chairs?

20

Describe and use patterns to multiply with 0 and 1.Use known patterns to solve unknown

facts.

(7 – 9 marks)

مثال (Work together)

صفحة 144

Work Together

There are 3 blue eggs, 2 white eggs, 1 spotted egg, and 0 brown eggs in each nest. How many of each type of egg are in 4 nests?

3 x 4 = 12 blue eggs

2 x 4 = 8 white eggs

1 x 4 = 4 spotted eggs

0 x 4 = 0 brown eggs

مثال (1-4)
صفحة 141

How can you use what you know about multiplication with 10 to answer the question?

1. What do you know about products of multiplication facts with a factor of 10?

   Number ends with 0

2. Paolo has a pile of dimes. Can the value of the dimes be 58¢? Explain.

   No, 1 dime = 10 cents ,
   58 do not come in pattern of 10.

3. **STEM Connection** Grace needs to write 10 lines of code for her character to complete one action. How many lines of code does she need to write for her character to complete 7 actions?

   10 x 7 = 70 lines

4. Janelle is arranging her rock collection. She arranges the rocks into rows as shown. She has fewer than 11 rows. How many rocks might Janelle have in all?

   10,20,30,40,50,60,70,80,90,100

21

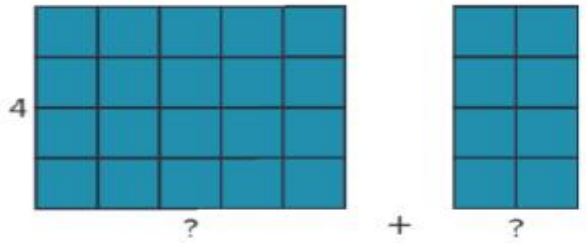
Demonstrates the understanding of the distributive property (7 – 9 marks)

مثال (1-4)

165 صفحة

Solve.

1. How can you use the representation to decompose 7?



$4 \times 7 = 4 \times \underline{5} + 4 \times \underline{2}$

$4 \times 7 = \underline{20} + \underline{8}$

$4 \times 7 = \underline{28}$

2. How can you decompose 9×6?

$9 \times 6 = \underline{9} \times \underline{5} + \underline{9} \times \underline{1}$

$9 \times 6 = \underline{45} + \underline{9}$

$9 \times 6 = \underline{54}$

What number makes the equation true?

3. $? \times 7 = 3 \times 7 + 3 \times 7$

$? = \underline{6}$

4. $7 \times ? = 5 \times 8 + 2 \times 8$

$? = \underline{8}$

5. $1 \times 9 + 5 \times 9 = 9 \times ?$

$\underline{6} = ?$

6. $6 \times 2 + 6 \times 2 = 6 \times ?$

$\underline{4} = ?$

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7. $8 \times 6 = \underline{8} \times \underline{5} + \underline{8} \times \underline{1}$

$8 \times 6 = \underline{40} + \underline{8}$

$8 \times 6 = \underline{48}$

8. $9 \times 7 = \underline{9} \times \underline{5} + \underline{9} \times \underline{2}$

$9 \times 7 = \underline{45} + \underline{18}$

$9 \times 7 = \underline{63}$

45
+18

9. $9 \times 8 = \underline{9} \times \underline{4} + \underline{9} \times \underline{4}$

$9 \times 8 = \underline{36} + \underline{36}$

$9 \times 8 = \underline{72}$

10. $8 \times 4 = \underline{8} \times \underline{2} + \underline{8} \times \underline{2}$

$8 \times 4 = \underline{16} + \underline{16}$

$8 \times 4 = \underline{32}$

16
+16