


Chapter 24: Represent and Interpret Data



Dear Family,
In the coming weeks, we will learn about interpreting and representing data and we will begin reviewing for the Math FAST assessment.

Please make sure all homework is completed, as it is important for test preparation. Reach out if you need any help.

Vocabulary

- **Categorical data:** A type of data that can be divided into groups.
- **Circle graph:** A graph that uses parts of a circle to show data.
- **Frequency table:** A frequency table uses numbers to record data.
- **Key:** The part of a pictograph that tells what the symbols stand for.
- **Line plot:** A line plot uses marks to record each piece of data above a number line.
- **Scale:** An equally spaced set of numbers that help determine the number a bar shows.

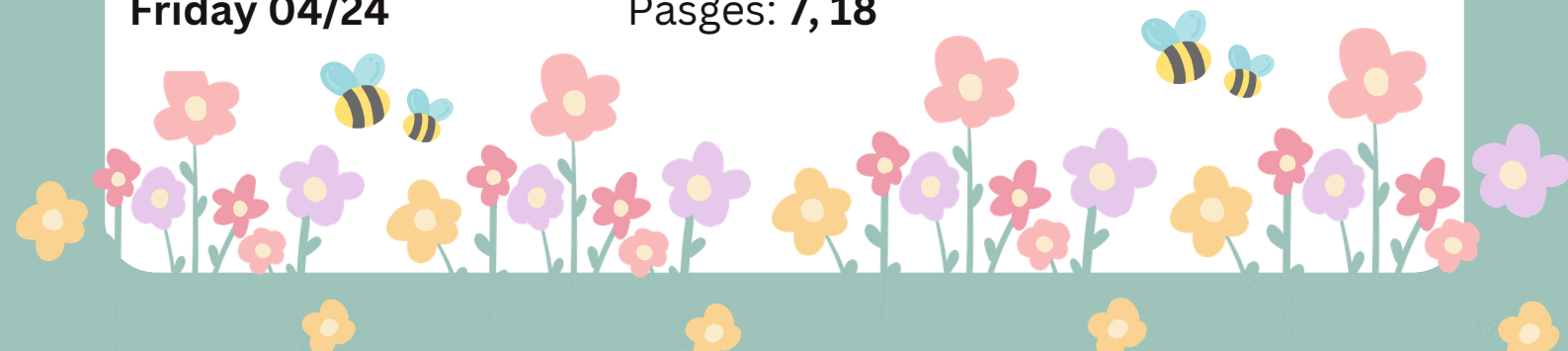
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- Homework due date: **Sunday, April 26th** (Upload HW on Archie)
 - Test on **Wednesday, April 22nd** (use last week's HW packet to study the names and characteristics of lines, angles, and quadrilaterals)
 - Math FAST Assessment PM3: **May 20th**

- Feel free to contact me with any questions at diana.charaf@archimedean.org



Complete homework daily based on the schedule provided below:

Monday 04/20	Pages: 21, 22
Tuesday 04/21	Pages: 23, 24
Wednesday 04/22	Pages: 27, 28
Thursday 04/23	Pages: 29, 30
Friday 04/24	Pages: 7, 18



Name _____

Review & Refresh

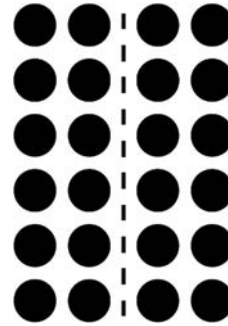
1. Find the product of 6×4 . Use Distributive Property

$$6 \times 4 = 6 \times (\underline{\quad} + \underline{\quad})$$

$$6 \times 4 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$$

$$6 \times 4 = \underline{\quad} + \underline{\quad}$$

$$6 \times 4 = \underline{\quad}$$



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2. Draw a model to find the product of 3×8 .

Find the product.

3. $3 \times 2 = \underline{\quad}$

4. $4 \times 8 = \underline{\quad}$

5. $0 \times 4 = \underline{\quad}$

6.
$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$$

-
10. You buy 4 books and 10 magazines. Each book costs \$8 and each magazine costs \$3. How much money do you spend in all?

Name _____

Review & Refresh (continued)

11. A tricycle has 3 wheels. A gym teacher is replacing the wheels on 8 tricycles. How many wheels does the gym teacher need?

-
12. Match each equation with the correct property.

$3 \times 8 = 8 \times 3$

a. Associative Property of Addition

$5 + 6 = 6 + 5$

b. Associative Property of Multiplication

$2 \times (4 \times 5) = (2 \times 4) \times 5$

c. Commutative Property of Multiplication

$(7 + 9) + 1 = 7 + (9 + 1)$

d. Commutative Property of Addition

Compare.

13. 5×2 ○ 5×3

14. 9×6 ○ 6×8

15. 81 ○ 9×9

-
16. Newton buys 4 baskets of apples and 7 baskets of oranges. Each basket of apples costs \$5 and each basket of oranges costs \$4. How much money does Newton spend in all?

-
17. A can of tennis balls has 3 balls. How many tennis balls are there in 6 cans? How many tennis balls are there in 12 cans?

Name _____

Review & Refresh

1. Find the product.

$$6 \times 9 = 6 \times (\underline{\quad} - \underline{\quad})$$

$$6 \times 9 = (\underline{\quad} \times \underline{\quad}) - (\underline{\quad} \times \underline{\quad})$$

$$6 \times 9 = \underline{\quad} - \underline{\quad}$$

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

2. Complete the equations.

$$8 \times 9 = (8 \times 5) + (\underline{\quad} \times \underline{\quad})$$

$$4 \times 12 = (4 \times 10) + (\underline{\quad} \times \underline{\quad})$$

$$5 \times (8 \times 7) = (5 \times \underline{\quad}) \times \underline{\quad}$$

Find the missing factor.

3. $3 \times \underline{\quad} = 27$

4. $\underline{\quad} \times 9 = 36$

5. $72 = \underline{\quad} \times 6$

6. Divide 40 counters into groups of 5. How many groups are there?

$$40 \div 5 = \underline{\quad}$$

Find the product.

7. $(1 \times 9) \times 3 = \underline{\quad}$

8. $8 \times (4 \times 3) = \underline{\quad}$

9. $2 \times (5 \times 5) = \underline{\quad}$

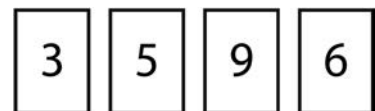
10. Use each number card once to complete the equations.

$$(4 \times 2) \times \underline{\quad} = 72$$

$$\underline{\quad} \times (2 \times 5) = 60$$

$$(2 \times \underline{\quad}) \times 4 = 40$$

$$7 \times (\underline{\quad} \times 2) = 42$$



Name _____

Review & Refresh (continued)

11. How many total oranges are in 4 bags with 6 oranges in each bag?

12. There are 96 students in a club. The club buys 3 boxes of hats. Each box contains 10 packages with 4 hats in each. Are there enough hats for each student in the club? Explain.

13. You have 14 pencils. You buy 6 more pencils. Can you divide your pencils into 5 equal groups? Explain.

Tell whether the equation is *true* or *false*.

14. $8 \times (2 \times 1) \stackrel{?}{=} 8 + (2 + 1)$

15. $6 \times (9 \times 7) \stackrel{?}{=} (7 \times 6) \times 9$

16. Newton and Descartes are keeping track of how many books they read over four weeks. During Weeks 3 and 4 Newton and Descartes doubled the total number of books they read in Weeks 1 and 2. Did Newton read more books than Descartes in Weeks 3 and 4? Explain.

Books Read		
	Newton	Descartes
Week 1	1	3
Week 2	3	1
Weeks 3 and 4		

Name _____

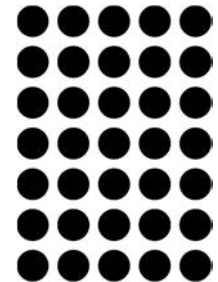
1. Select all the ways can you break apart the array.

Ⓐ $(7 \times 2) + (7 \times 3)$

Ⓒ $(7 \times 4) + (7 \times 1)$

Ⓑ $(3 \times 7) + (5 \times 7)$

Ⓓ $(8 + 3) \times (8 + 2)$



2. Match the expression with the correct symbol.

	8×6 ○ 6×9	6×3 ○ $3 \times (2 + 4)$	0×9 ○ 9×0
>	Ⓐ	Ⓑ	Ⓒ
<	Ⓓ	Ⓔ	Ⓕ
=	Ⓖ	Ⓗ	Ⓖ

3. Which expression does *not* belong with the other three?

Ⓐ 4×9

Ⓒ $(4 \times 4) + (4 \times 5)$

Ⓑ 4×5

Ⓓ $(9 \times 2) + (9 \times 2)$

4. The tally chart shows the number of flower bouquets a florist sells each day. Each flower bouquet has 5 roses. How many roses does the florist sell on the busiest day?

Bouquets Made	
Monday	
Tuesday	
Wednesday	

Name _____

5. This question has **two** parts.

There are 9 adults and 12 children in a group who want to ride a roller coaster.

Age	Roller Coaster Ticket Price
Adult	\$2
Child	Free

Part A What is the total cost, in dollars, for the group to ride the roller coaster?

Part B Which expression could you use to find the total cost if the price for a child was also \$2?

- Ⓐ $(2 \times 9) + (2 \times 12)$
- Ⓑ $(2 + 9) \times (2 + 12)$
- Ⓒ $(2 \times 9) \times (2 \times 12)$
- Ⓓ $(2 \times 2) + (9 \times 12)$

6. There are 81 campers at a summer camp. There are 4 boxes of shirts for the campers. Each box has 10 packages with 2 shirts in each package. Are there enough shirts for all the campers? Why or why not?

- Ⓐ No, because $4 \times 10 \times 2 < 81$.
- Ⓑ No, because $4 \times (10 + 2) < 81$.
- Ⓒ Yes, because $4 \times 10 \times 12 > 81$.
- Ⓓ Yes, because $4 \times 10 \times 2 < 81$.

7. You divide 20 action figures into 2 equal groups. How many action figures are in each group?

- Ⓐ 7 action figures
- Ⓑ 8 action figures
- Ⓒ 9 action figures
- Ⓓ 10 action figures

Name _____

8. A ranger visits 3 local parks. There are 5 water fountains at each park that need a new battery. The ranger has 19 batteries. Does the ranger have enough batteries for all the fountains? Why or why not?

- (A) No, because $3 \times 19 > 5$. (C) Yes, because $3 + 5 < 19$.
(B) No, because $19 - 5 > 3$. (D) Yes, because $3 \times 5 < 19$.
-

9. You have 3 large pizzas. Each pizza has 8 slices. How many slices of pizza do you have in all?

10. In a game, teams earn 5 points for each correct answer and lose 3 points for each incorrect answer. Your team answers 8 questions correctly and 7 questions incorrectly. How many points does your team have at the end of the game? For each box, fill in the bubble before the number that is correct.

Your team earns

(A) 12
(B) 24
(C) 40
(D) 56

 points and loses

(A) 15
(B) 21
(C) 35
(D) 45

 points.

Your team ends the game with

(A) 19
(B) 25
(C) 34
(D) 41

 points.

Name _____

11. You use the Distributive Property to solve 9×7 . Which is the correct next step?

- (A) $9 \times 7 = (10 \times 7) + (1 + 7)$ (C) $9 \times 7 = (10 \times 7) + (1 \times 7)$
(B) $9 \times 7 = (10 \times 7) - (10 - 1)$ (D) $9 \times 7 = (10 \times 7) - (1 \times 7)$

12. Newton and Descartes play a game with their classmates. Newton's team answers 4 math questions, 6 history questions, and 3 science questions correctly. How many points does Newton's team score?

Study Game			
Question Type	Math	History	Science
Points Scored if Answered Correctly	4	7	5

13. You are buying lightbulbs for your house. For each box, fill in the bubble before the number that is correct.

You buy 8 packs of 3 lightbulbs. You buy _____ lightbulbs in all.

- (A) 11
(B) 24
(C) 27

You need 27 lightbulbs. You _____ buy enough lightbulbs.

- (A) did
(B) did not

You have _____ extra lightbulbs. You need _____ more lightbulbs.

- (A) 0
(B) 1
(C) 3

- (A) 0
(B) 1
(C) 3

Name _____

1. Select all the statements that can be used to represent the model.



- A 4 groups of 8 D $4 + 8 = 12$
 B 8 groups of 4 E $4 \times 8 = 32$
 C $4 + 4 + 4 + 4 = 16$ F $8 + 8 + 8 + 8 = 32$

-
2. Descartes has 7 groups of 6 cards. Complete the statements. For each box, fill in the bubble before the expression or number that is correct.

The total number of cards Descartes has can be written as

- | |
|--------------------------------------|
| <input type="radio"/> A 7×6 |
| <input type="radio"/> B 6×5 |
| <input type="radio"/> C 5×4 |

He can use the Commutative Property of Multiplication and rewrite the

expression as

- | |
|--------------------------------------|
| <input type="radio"/> A 4×5 |
| <input type="radio"/> B 5×6 |
| <input type="radio"/> C 6×7 |

. Descartes has

- | |
|----------------------------|
| <input type="radio"/> A 20 |
| <input type="radio"/> B 30 |
| <input type="radio"/> C 42 |

cards.

-
3. You have a dentist appointment at quarter to 11. What time is your dentist appointment?

- A 10:15
 B 10:45
 C 11:15
 D 11:45

4. Newton has 5 baskets with 6 oranges in each basket. Descartes has 6 baskets with 5 oranges in each basket. How many oranges do they have in all?

-
5. Which multiplication equation is the same as $8 + 8 + 8 + 8 + 8 + 8 = 48$?

- (A) $4 \times 12 = 48$ (C) $48 \times 1 = 48$
(B) $6 \times 8 = 48$ (D) $3 \times 16 = 48$
-

6. A group of friends orders 3 bottled waters, 4 milks, and 3 sparkling waters. How much money, in dollars, do the friends spend in all?

Beverage	Price
Bottled Water	\$2
Milk	\$1
Orange Juice	\$3
Sparkling Water	\$4