

MATH

Chapter 6: Understand Multiplication

Dear Family,
This week, our math class will be learning about multiplication. We will learn how addition is related to multiplication and about the properties of multiplication

Vocabulary

Array: A set of objects in row and columns.

Equal groups: Groups that have the same number of objects.

Factor: A number that is multiplied by number to find a product.

Product: The answer in a multiplication problem.

Multiply: When you multiply, you combine equal groups to find how many in all.

- Homework due date: **Sunday, Nov. 10th**
- Homework should be uploaded on **Archie**
- Chapter 6 Test **Tuesday, Nov. 12th**
- Feel free to contact me with any questions at diana.charaf@archimedean.org

Complete homework daily based on the schedule provided below:

Monday 11/04

pages: 215-216

Tuesday 11/05

pages: 221-222

Wednesday 11/06

pages: 227-228

Thursday 11/07

pages: 233-234

Friday 11/08

pages: 239-240

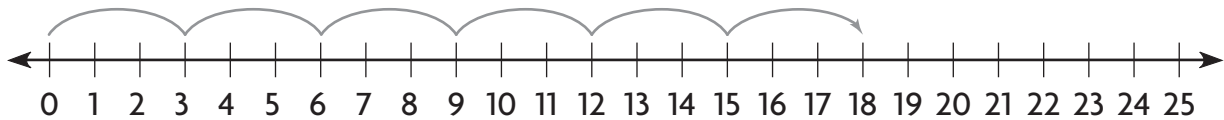
Represent Multiplication with Number Lines

Go Online

Interactive Examples

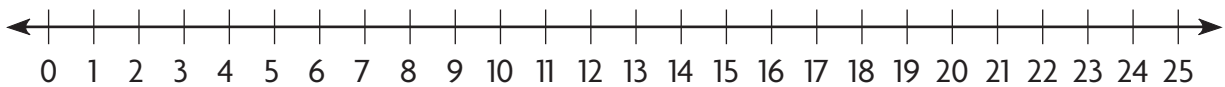
Draw the jumps on the number line to show equal groups. Complete the multiplication equation that the number line shows.

1. 6 groups of 3



$$6 \times 3 = \underline{\quad\quad}$$

2. 2 groups of 6



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

Problem Solving

3. Allie is baking muffins for students in her class. There are 6 muffins in each baking tray. She bakes 5 trays of muffins. How many muffins is she baking?
4. A snack package has 4 cheese sticks. How many cheese sticks are in 4 packages?

Lesson Check

6. Louise skip counts by 4 on a number line to find 5×4 . How many jumps should she draw on the number line?
7. Theo needs 4 boards that are each 3 feet long to make bookshelves. How many feet of boards does he need altogether?

Spiral Review

8. Estimate the sum.
9. Which number would you put in a frequency table to show |||| ||| ?

$$\begin{array}{r} 518 \\ +251 \\ \hline \end{array}$$

10. A manager at a shoe store received an order for 346 pairs of shoes. What is 346 rounded to the nearest hundred?
11. Tobias is making a pictograph. Each picture of a book is equal to 2 books he has read. The row for Month 1 has 3 pictures of books. How many books did Tobias read during Month 1?

Represent Multiplication with Bar Models

Go Online

Interactive Examples

Draw a bar model to solve each problem.

1. Roberto put some toy blocks into 3 rows. There are 5 blocks in each row. How many blocks are there?
2. Mr. Fernandez is putting tiles on his kitchen floor. There are 2 rows with 9 tiles in each row. How many tiles are there?
3. In Jillian's garden, there are 3 rows of carrots, 2 rows of string beans, and 1 row of peas. There are 8 plants in each row. How many plants are there in the garden?
4. Maya visits the craft store. On one wall, there are 6 different types of fabric on each of 5 shelves. On another wall, there are 4 different types of fabric on each of 4 shelves. How many different types of fabric are there on the shelves?
5. The media center at Josh's school has a computer area. The first 4 rows have 6 computers each. The fifth row has 4 computers. How many computers are there?

5	5	5
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blocks

15 blocks

Lesson Check

7. There are 5 shelves of video games in a store. There are 6 video games on each shelf. How many video games are there on the shelves?
8. Ken watches a marching band. He sees 2 rows of flute players. Six people are in each row. He sees 8 trombone players. How many flute players and trombone players does Ken see?

Spiral Review

9. What is the sum of 438 and 382?
10. Estimate the sum.

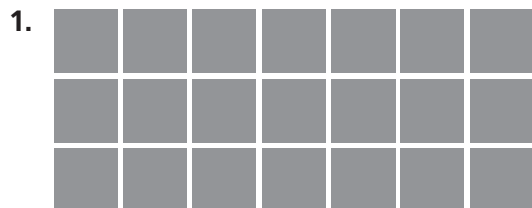
$$\begin{array}{r} 622 \\ + 84 \\ \hline \end{array}$$

11. Francine uses 167 silver balloons and 182 gold balloons for her store party. How many silver and gold balloons does Francine use?
12. Yoshi is making a pictograph. Each picture of a soccer ball stands for two goals he scored for his team. The row for January has 9 soccer balls. How many goals did Yoshi score during January?

Represent Multiplication with Arrays

[Go Online](#)[Interactive Examples](#)

Write a multiplication equation for the array.



$3 \times 7 = \underline{\hspace{2cm}}$



$2 \times 5 = \underline{\hspace{2cm}}$

Draw an array to find the product.

3. $4 \times 2 = \underline{\hspace{2cm}}$

4. $2 \times 8 = \underline{\hspace{2cm}}$

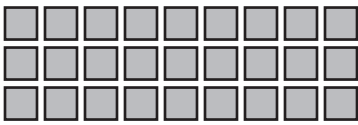
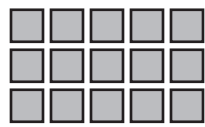
Problem Solving

5. Lenny is moving tables in the school cafeteria. He places all the tables in a 7×4 array. How many tables are in the cafeteria?

6. Ms. DiMeo directs the school choir. She has the singers stand in 3 rows. There are 8 singers in each row. How many singers are there?

Lesson Check

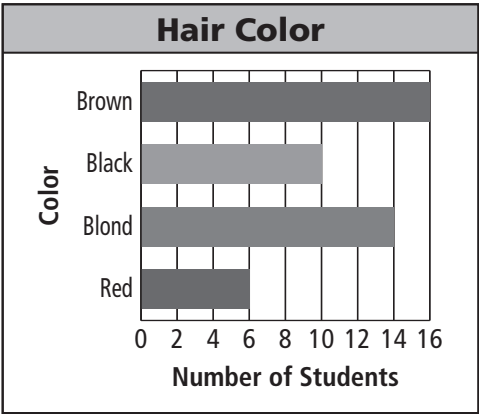
8. What multiplication equation does this array show?
9. What multiplication equation does this array show?



Spiral Review

10. Use the table to find who traveled 700 miles farther than Paul during summer vacation.
11. Use the bar graph to find what hair color most students have.

Summer Vacations	
Name	Distance in Miles
Paul	233
Andrew	380
Bonnie	790
Tara	933
Susan	853



12. Spencer orders 235 cans of tomatoes to make salsa for the festival. What is 235 rounded to the nearest ten?
13. Which bar would be the longest on a bar graph of the data?

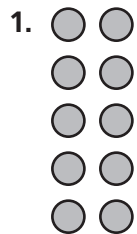
Favorite Pizza Topping	
Topping	Votes
Cheese	5
Pepperoni	4
Vegetable	1
Sausage	3

Understand the Commutative Property of Multiplication

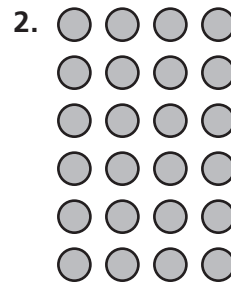
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Interactive Examples

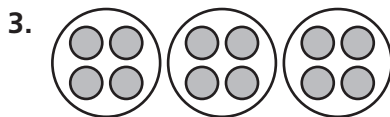
Write a multiplication equation for the model. Then use the Commutative Property of Multiplication to write a related multiplication equation.



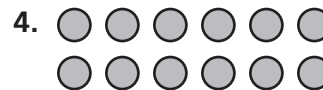
$$\begin{array}{r} 5 \times 2 = 10 \\ 2 \times 5 = 10 \end{array}$$



$$\begin{array}{r} ___ \times ___ = ___ \\ ___ \times ___ = ___ \end{array}$$



$$\begin{array}{r} ___ \times ___ = ___ \\ ___ \times ___ = ___ \end{array}$$



$$\begin{array}{r} ___ \times ___ = ___ \\ ___ \times ___ = ___ \end{array}$$

Problem Solving

- In a tree with 7 big branches, 4 crows wait on each branch. All the crows fly up and land again on only 4 branches. If there are an equal number of crows on each branch, how many crows are on the four branches?

- A park has 3 playgrounds and 11 children are playing at each playground. Then all the children go to sit at 11 tables. If an equal number of children sit at each table, how many children are at each table?

Lesson Check

8. Write a multiplication equation that shows the Commutative Property of Multiplication.

9. What factor makes the equation true?

$$7 \times 4 = \square \times 7$$

Spiral Review

10. Ms. Williams drove 149 miles on Thursday and 159 miles on Friday. About how many miles did she drive altogether?

11. Inez has 699 pennies and 198 nickels. Estimate how many more pennies than nickels she has.

12. This year, the parade had 127 floats. That was 34 fewer floats than last year. How many floats were in the parade last year?

13. Jeremy made a tally table to record how his friends voted for their favorite pet. His table shows $\text{||||} \text{ |||} \text{ ||}$ next to Dog. How many friends voted for dog?

Name _____

LESSON 6.7
Practice and Homework

Understand the Identity and Zero Properties of Multiplication

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Interactive Examples

Find the product.

1. $1 \times 4 =$ _____

2. $0 \times 8 =$ _____

3. $0 \times 4 =$ _____

4. $1 \times 6 =$ _____

5. $3 \times 0 =$ _____

6. $0 \times 9 =$ _____

7. $8 \times 1 =$ _____

8. $1 \times 2 =$ _____

9. $10 \times 1 =$ _____

10. $2 \times 0 =$ _____

11. $5 \times 1 =$ _____

12. $1 \times 0 =$ _____

13. $0 \times 0 =$ _____

14. $1 \times 3 =$ _____

15. $9 \times 0 =$ _____

16. $1 \times 1 =$ _____

Problem Solving



17. Peter is in the school play. His teacher gave 1 copy of the play to each of 6 students. How many copies of the play did the teacher hand out?

18. There are 4 egg cartons on the table. There are 0 eggs in each carton. How many eggs are there in all?

Lesson Check

20. There are 0 bicycles in each bicycle rack. If there are 8 bicycle racks, how many bicycles are there in the racks?

21. What is the product?

$$1 \times 0 = \underline{\quad}$$

Spiral Review

22. Mr. Ellis drove 197 miles on Monday and 168 miles on Tuesday. How many miles did he drive?

23. What multiplication equation does the array show?



Use the bar graph for 24–25.

24. How many cars were washed on Friday and Saturday combined?

25. How many more cars were washed on Saturday than on Sunday?

