



Chapter 10: Apply Multiplication and Division

Dear Family, During the next few weeks, our math class will be learning strategies for finding multiples, determining even or odd numbers, finding unknown numbers, and solving two-step multiplication and division problems. You can expect to see homework that provides practice with strategies for multiplying and dividing.

Kindly refer to the first six pages of the past homework for definitions, rules, and examples related to multiples and divisibility.

Vocabulary

Expression: A part of an equation that has numbers and operation signs but does not have an equal sign.

Divisible: A number is divisible if the number is a counting number and can be evenly divided.

Multiple: When you multiply a number by a whole number, you get a multiple of that first number.

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- Homework due date: **Sunday, Feb. 9th** (Upload HW on Archie)
 - Chapter 10 Test: **Tuesday, Feb. 11th** (Use this homework to practice for the test)
 - Feel free to contact me with any questions at [**diana.charaf@archimedean.org**](mailto:diana.charaf@archimedean.org)
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Complete homework daily based on the schedule provided below:

Monday 02/03

Tuesday 02/04

Wednesday 02/05

Thursday 02/06

Friday 02/07

BB.2 on IXL

pages: **493, 494**

pages: **495, 496**

pages: **497, 498**

pages: **499, 500**

Solve Two-Step Division Problems

Go Online

Interactive Examples

Solve the problem.

1. Jack has 3 boxes of pencils with the same number of pencils in each box. His mother gives him 4 more pencils. Now Jack has 28 pencils. How many pencils are in each box?

Think: I can start with 28 counters and act out the problem.

2. Li writes 9 poems and then 9 more. She gives 6 poems to each of her sisters and has none left. How many sisters does she have?
3. Ricardo has 2 cases of video games with the same number of games in each case. He gives 4 games to his brother. Ricardo has 10 games left. How many video games were in each case?
4. Haua has \$50 to spend on gifts for her friends. Her mother gives her \$5 more. If each gift costs \$5, how many gifts can she buy?
5. Joe has a collection of 35 paintings. He received 8 of them as gifts. Joe bought the rest over 3 years. If he bought the same number of paintings each year, how many paintings did Joe buy last year?
6. **WRITE** *Math* Write a division word problem and explain how to solve it by *acting it out*.



8 pencils

Lesson Check

7. Gavin saved \$16 to buy packs of baseball cards. His father gives him \$4 more. If each pack of cards costs \$5, how many packs can Gavin buy?
8. Chelsea buys 8 packs of markers. Each pack contains the same number of markers. Chelsea gives 10 markers to her brother. Then, she has 86 markers left. How many markers were in each pack?

Spiral Review

9. Each foot has 5 toes. How many toes do 6 feet have?
10. Each month for 5 months, Sophie makes 2 quilts. How many more quilts does she need to make to have 16 quilts?

11. Meredith practices the piano for 3 hours each week. How many hours will she practice in 8 weeks?
12. Find the unknown factor.

$$9 \times \square = 36$$

Chapter Review

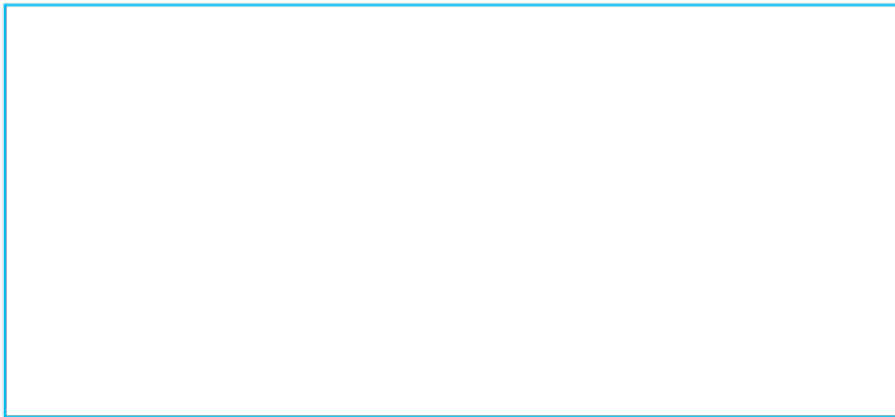
- The camping club wants to rent rafts. Each raft can hold 8 people. Which equation could be used to find how many rafts are needed for 32 people?

(A) $8 \times 32 = \square$

(B) $32 \times \square = 8$

(C) $\square \times 8 = 32$

(D) $32 \times 8 = \square$
- Draw a bar model and write a multiplication expression to represent the comparison *4 times as many as 9*.



Find the unknown number.

4. $m \times 5 = 30$

$m = \underline{\hspace{2cm}}$

6. $20 = 2 \times n$

$n = \underline{\hspace{2cm}}$

8. $7 = 63 \div y$

$y = \underline{\hspace{2cm}}$

5. $48 \div \square = 6$

$\square = \underline{\hspace{2cm}}$

7. $p \div 8 = 4$

$p = \underline{\hspace{2cm}}$

9. $1 \times 10 = \star$

$\star = \underline{\hspace{2cm}}$

For Problems 10 and 11, describe a pattern for the table. Then complete the table.

10.

Weeks	1	2	3	4	5
Days	7	14	21		

11.

Tickets	2	3	4	5	6
Cost	\$8	\$12	\$16		

12. Giana says that 33 is an even number. Is she correct? Explain.

- (A) yes; You can make 2 equal groups with one left over.
- (B) yes; You can make 2 equal groups.
- (C) no; You can make 2 equal groups with one left over.
- (D) no; You can make 2 equal groups.

13. List the first five multiples of 9.

14. Which numbers are a multiple of **oth** 3 and 4? (Hint: There is more than one answer.)

- | | |
|--------|--------|
| (A) 12 | (E) 24 |
| (B) 6 | (F) 16 |
| (C) 21 | (G) 20 |
| (D) 36 | |

Name _____

15. Derek has 6 dogs. Each dog gets 3 dog biscuits every day. How many biscuits will Dexter need for all of his dogs for Saturday and Sunday?

☐ (A) 18
☐ (B) 8
☐ (C) 16
☐ (D) 36

16. Brooklyn has 10 dolphin stickers. Jorge's stickers can be represented by 3×10 . Which comparison statement describes the expression?

☐ (A) Brooklyn has 10 more stickers than Jorge.
☐ (B) Jorge has 3 times as many stickers as Brooklyn.
☐ (C) Brooklyn has 3 more stickers than Jorge.
☐ (D) Jorge has 3 fewer stickers than Brooklyn.

17. Explain why 60 is a multiple of 5, 6, 10, and 12. You can write equations as part of your explanation.

18. Hanya's puppy weighs 23 pounds. If he gains 3 pounds every month for the next five months, how much will the puppy weigh at the end of the fifth month?

19. Tim describes a pattern. He says the pattern shown in the table is “Add 3.” Is Tim correct? Explain how you know.

Packages	1	2	3	4	5
Markers	4	8	12	16	20

20. There are 54 students in the marching band. They form equal rows, so that there are no fewer than 5 rows and no more than 10 students in each row. Which is an array that the students could use?

- ☐ A 6 rows of 9 students
- ☐ B 5 rows of 10 students
- ☐ C 10 rows of 5 students
- ☐ D 6 rows of 8 students

21. Describe a pattern for this table.

Tanks	3	4	5	6	7
Fish	240	320	400	480	560

Pattern: _____

How would the table change if the pattern was “Multiply the number of tanks by 8”? Explain.

Name _____


22. Sally has 4 comic books. Renaldo has 6 comic books.

Jay has 2 times as many comic books as Sally and Renaldo combined. Which expression represents the number of comic books Jay has compared to Sally and Renaldo combined?

- (A) $4 + 6$
- (B) 2×6
- (C) 2×10
- (D) $2 \div 10$

23. The camping club rents 4 rafts. How many people can 4 rafts hold?

- (A) 28
- (B) 30
- (C) 42
- (D) 32

Rafts	1	2	3	4
People	8	16	24	

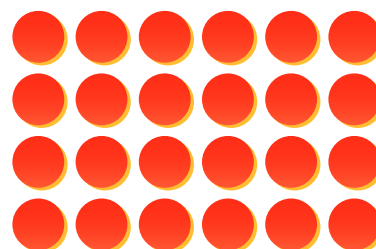
24. There are 24 students in Mr. Smith's class and 30 students in Mr. Becker's class. The students sit in chairs in the gymnasium in rows with 6 chairs in each row. How many rows of chairs are there in all?

- (A) 54
- (B) 4
- (C) 9
- (D) 5

25. Use the array. Which number makes the equation true?

$24 \div 4 = \underline{\hspace{2cm}}$

- (A) 6
- (B) 8
- (C) 20
- (D) 12



26. For Problems 26a–26d, choose Odd or Even to describe the product.

- 26a. 52×98 ☐ Odd ☐ Even
- 26b. 25×30 ☐ Odd ☐ Even
- 26c. 84×43 ☐ Odd ☐ Even
- 26d. 49×71 ☐ Odd ☐ Even

27. Circle all the numbers that are divisible by 2.

115 275 566 328 459 732

28. The number of marbles in a jar is a multiple of 8. Which of these could be the number of marbles in the jar? Select all that apply.

- ☒ A 24
- ☐ B 38
- ☐ C 40
- ☐ D 56
- ☐ E 62
- ☐ F 84

29. O’Shunti has a new book for her stickers. She uses pages that hold 8 stickers and pages that hold 4 stickers. If O’Shunti has 32 stickers, how many different ways can she put them in her book? Complete the table and write the answer below.

Pages with 8 Stickers	1	2		4
Pages with 4 Stickers	6		2	
Total Stickers	32			

O’Shunti can put the stickers in her book _____ ways.