

## Chapter 9: Division Facts and Strategies

**Dear Family,**

During the next few weeks, our math class will be learning about division facts and strategies.

We will learn strategies to use to divide by 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12.

You can expect to see homework that provides practice with dividing by these divisors.

### **Vocabulary**

**Array:** An arrangement of objects in rows and columns.

**Dividend:** The number that is to be divided in a division problem.

**Divisor:** The number that divides the dividend.

**Related facts:** A set of related multiplication and division equations.

**Quotient:** The number, not including the remainder, that results from division.

- 
- Homework due date: **Sunday, Jan. 26th** (Upload HW on **Archie**)
  - Chapter 8 Test: **Tuesday, Jan. 21st**
  - Chapter 9 Test: **Monday, Jan. 27th** (This week's homework is practice for the test)
  - Feel free to contact me with any questions at [diana.charaf@archimedean.org](mailto:diana.charaf@archimedean.org)
- 

**Complete homework daily based on the schedule provided below:**

**Monday 01/20**  
**Tuesday 01/21**  
**Wednesday 01/22**  
**Thursday 01/23**  
**Friday 01/24**

**No HW**  
pages: **443, 425**  
pages: **445, 446**  
pages: **447, 448**  
pages: **449, 450**



# Divide by 12

**Go Online**

Interactive Examples

**Find the unknown factor and quotient.**

1.  $\underline{\hspace{1cm}} \times 7 = 84$

$84 \div 7 = \underline{\hspace{1cm}}$

2.  $12 \times \underline{\hspace{1cm}} = 36$

$36 \div 12 = \underline{\hspace{1cm}}$

3.  $12 \times \underline{\hspace{1cm}} = 12$

$12 \div 12 = \underline{\hspace{1cm}}$

4.  $\underline{\hspace{1cm}} \times 9 = 108$

$108 \div 9 = \underline{\hspace{1cm}}$

**Find the quotient.**

5.  $\underline{\hspace{1cm}} = 120 \div 12$

6.  $60 \div 12 = \underline{\hspace{1cm}}$

7.  $\underline{\hspace{1cm}} = 96 \div 12$

8.  $144 \div 12 = \underline{\hspace{1cm}}$

9.  $8 \overline{)96}$

10.  $12 \overline{)48}$

11.  $12 \overline{)24}$

12.  $6 \overline{)72}$

**Find the unknown number.**

13.  $72 \div \blacksquare = 12$

14.  $12 \div \blacksquare = 1$

15.  $36 \div a = 3$

16.  $k \div 12 = 11$

$\blacksquare = \underline{\hspace{1cm}}$

$\blacksquare = \underline{\hspace{1cm}}$

$a = \underline{\hspace{1cm}}$

$k = \underline{\hspace{1cm}}$


## Problem Solving

17. A teacher bought 6 books. Each book costs \$12. How much did the teacher spend in all?

---

18. A summer camp has 1 counselor for every 12 children. If there are 132 children at the camp, how many counselors are there?

---

19.  **WRITE** *Math* Describe which strategy you would use to divide 48 by 12.

---

---

# Divide by 8

Go Online

Interactive Examples

Find the unknown factor and quotient.

1.  $8 \times \overset{4}{\underline{\quad}} = 32$

$32 \div 8 = \underline{\quad}$

2.  $3 \times \underline{\quad} = 27$

$27 \div 3 = \underline{\quad}$

3.  $8 \times \underline{\quad} = 8$

$8 \div 8 = \underline{\quad}$

4.  $8 \times \underline{\quad} = 72$

$72 \div 8 = \underline{\quad}$

Find the quotient.

5.  $\underline{\quad} = 24 \div 8$

6.  $40 \div 8 = \underline{\quad}$

7.  $\underline{\quad} = 56 \div 8$

8.  $14 \div 2 = \underline{\quad}$

9.  $8 \overline{)64}$

10.  $7 \overline{)28}$

11.  $8 \overline{)16}$

12.  $8 \overline{)48}$

Find the unknown number.

13.  $72 \div \blacksquare = 9$

14.  $25 \div \blacksquare = 5$

15.  $24 \div a = 3$

16.  $k \div 10 = 8$

$\blacksquare = \underline{\quad}$

$\blacksquare = \underline{\quad}$

$a = \underline{\quad}$

$k = \underline{\quad}$


## Problem Solving

17. Sixty-four students are going on a field trip. There is 1 adult for every 8 students. How many adults are there?

\_\_\_\_\_

18. Mr. Chen spends \$32 for tickets to a play. If the tickets cost \$8 each, how many tickets does Mr. Chen buy?

\_\_\_\_\_

19.  *Math* Describe which strategy you would use to divide 48 by 8.

\_\_\_\_\_

\_\_\_\_\_

Name \_\_\_\_\_

# Chapter Review

1. Ming shared 35 marbles among 7 different friends. Each friend received the same number of marbles. How many marbles did Ming give to each friend?

- ☐ A 4 marbles                      ☐ C 6 marbles  
☐ B 5 marbles                      ☐ D 7 marbles

2. Mrs. Conner has 16 shoes.



Select one number from each column to show the division equation represented by the picture.

$$16 \div \frac{?}{\text{(divisor)}} = \frac{?}{\text{(quotient)}}$$

Divisor	Quotient
<input type="radio"/> 1	<input type="radio"/> 1
<input type="radio"/> 2	<input type="radio"/> 4
<input type="radio"/> 4	<input type="radio"/> 8
<input type="radio"/> 16	<input type="radio"/> 16

3. There are 20 boys going camping. They brought 5 tents. An equal number of boys sleep in each tent. How many boys will sleep in each tent? Write a related multiplication equation and explain how to use it to find the answer.




---



---

4. Circle a number for the unknown factor and quotient that makes the equation true.

$$4 \times \begin{array}{|c|} \hline 6 \\ \hline 7 \\ \hline 8 \\ \hline \end{array} = 28$$

$$\begin{array}{|c|} \hline 6 \\ \hline 7 \\ \hline 8 \\ \hline \end{array} = 28 \div 4$$

5. Mrs. Walters has 30 markers. She gives each student 10 markers. How many students receive the markers? Use repeated subtraction to solve the problem. Show your work.

Write a division equation to represent the repeated subtraction.

\_\_\_\_\_  $\div$  \_\_\_\_\_ = \_\_\_\_\_

6. Complete the chart to show the quotients.

$\div$	27	36	45	54
9				

7. For Problems 7a–7e, select True or False for each equation.

7a.  $12 \div 6 = 2$  ☐ True ☐ False

7b.  $24 \div 6 = 3$  ☐ True ☐ False

7c.  $30 \div 6 = 6$  ☐ True ☐ False

7d.  $42 \div 6 = 7$  ☐ True ☐ False

7e.  $48 \div 6 = 8$  ☐ True ☐ False

Name \_\_\_\_\_

8. For Problems 8a-8f, find the missing factor and the quotient.

8a.  $12 \times \underline{\hspace{2cm}} = 144$        $144 \div 12 = \underline{\hspace{2cm}}$

8b.  $11 \times \underline{\hspace{2cm}} = 132$        $132 \div 11 = \underline{\hspace{2cm}}$

8c.  $11 \times \underline{\hspace{2cm}} = 88$        $88 \div 11 = \underline{\hspace{2cm}}$

8d.  $3 \times \underline{\hspace{2cm}} = 21$        $21 \div 3 = \underline{\hspace{2cm}}$

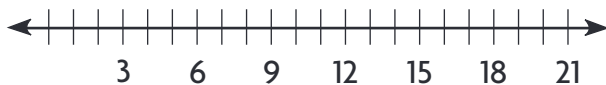
8e.  $3 \times \underline{\hspace{2cm}} = 18$        $18 \div 3 = \underline{\hspace{2cm}}$

8f.  $8 \times \underline{\hspace{2cm}} = 64$        $64 \div 8 = \underline{\hspace{2cm}}$

9. Keith arranged 40 toy cars in 8 equal rows. How many toy cars are in each row?

\_\_\_\_\_ toy cars

10. Bella made \$21 selling 3 bracelets. She sold each bracelet for the same price. Use the number line to decide how much each bracelet cost. Show your work.



One bracelet cost \_\_\_\_\_.

11. There are 24 children seated at 6 picnic tables. The same number of children are at each table. How many children are at each table? Draw an array to find out. Then write the answer.

12. Finn bought 5 packs of stickers. Each pack had the same number of stickers. He has 55 stickers in all. How many stickers were in each pack? Explain how you solved the problem.

---

---

13. Ana used 49 strawberries to make 7 strawberry smoothies. She used the same number of strawberries in each smoothie. How many strawberries did Ana use in each smoothie?

\_\_\_\_\_ strawberries

14. For Problems 14a–14e, select True or False for each equation.

14a.  $72 \div 12 = 6$  ☐ True ☐ False

14b.  $132 \div 12 = 13$  ☐ True ☐ False

14c.  $96 \div 12 = 8$  ☐ True ☐ False

14d.  $144 \div 12 = 12$  ☐ True ☐ False

14e.  $84 \div 12 = 9$  ☐ True ☐ False

15. A flower shop sells daffodils in bunches of 9 daffodils. The shop sells 27 daffodils. How many bunches of daffodils does the shop sell?

\_\_\_\_\_ bunches

Name \_\_\_\_\_

16. Aviva started a table showing a division pattern.

$\div$	20	30	40	50
10				
5				

### Part A

Complete the table.

Compare the quotients when dividing by 10 and when dividing by 5. Describe a pattern you see in the quotients.

---

---

### Part B

Find the quotient,  $a$ .

$$70 \div 10 = a$$

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

Explain how you could use the value of  $a$  to find the value of  $n$ ?  
Find the value of  $n$ .

$$70 \div 5 = n$$

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

---

---

17. Mekhi needs 2 oranges to make a glass of orange juice. If oranges come in bags of 10, how many glasses of orange juice can he make using one bag of oranges?

\_\_\_\_\_ glasses



18. For Problems 18a–18e, select True or False for each equation.

18a.  $0 \div 9 = 0$  ☐ True ☐ False

18b.  $9 \div 9 = 1$  ☐ True ☐ False

18c.  $27 \div 9 = 4$  ☐ True ☐ False

18d.  $54 \div 9 = 6$  ☐ True ☐ False

18e.  $90 \div 9 = 9$  ☐ True ☐ False

19. Dola is making gift baskets for 4 friends. She has 16 prizes she wants to divide equally among the baskets. How many prizes should she put in each basket?

\_\_\_\_\_ prizes

20. Alicia is buying a pet rabbit. She needs to buy items for her rabbit at the pet store.

## Part A

Alicia buys a cage and 2 bowls for \$54. The cage costs \$30. Each bowl costs the same amount. What is the price of 1 bowl? Explain the steps you used to solve the problem.

---

---

## Part B

Alicia also buys 12 toys for \$60. The toys all cost the same amount. What was the price of each toy?

Each toy costs \$ \_\_\_\_\_.