

# Using Patterns to Divide

You can use basic facts and patterns to divide mentally.

**Using basic facts**

What is  $350 \div 70$ ?

Think:  $350 \div 70$  is the same as 35 tens  $\div$  7 tens.

$$35 \div 7 = 5$$

$$\text{So, } 350 \div 70 = 5.$$

**Using patterns**

What is  $5,400 \div 60$ ?

$5,400 \div 60$  is the same as  $540 \div 6$ .

$$54 \div 6 = 9, \text{ so } 540 \div 6 = 90.$$

$$\text{So, } 5,400 \div 60 = 90.$$

Find each quotient. Use mental math.

1.  $280 \div 70 =$  \_\_\_\_\_

2.  $320 \div 40 =$  \_\_\_\_\_

3.  $360 \div 60 =$  \_\_\_\_\_

4.  $7,200 \div 80 =$  \_\_\_\_\_

5.  $9,000 \div 30 =$  \_\_\_\_\_

6.  $4,800 \div 80 =$  \_\_\_\_\_

7.  $2,000 \div 40 =$  \_\_\_\_\_

8.  $5,600 \div 70 =$  \_\_\_\_\_

9. How is dividing 250 by 50 the same as dividing 2,500 by 500?

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10. Explain how you can mentally determine that  $35,000 \div 70 = 500$ .

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Name \_\_\_\_\_

# Problem Solving: Draw a Picture and Write an Equation

Draw a picture and write an equation. Then solve.

1. Tommy paid \$39 to fill up the gas tank in his car. If one gallon of gas costs \$3, how many gallons of gas did Tommy put in?

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2. To prepare for the brunch, Ivana needs to place 8 muffins in each basket. If she has 115 muffins, how many baskets will she need?

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3. Write a real-world problem that you can solve by writing an equation. The answer to the problem must be 6.

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4. The perimeter is the distance around an object. The perimeter of a square is 84 centimeters. What is the length of one side of the square?

**A** 75 cm      **B** 42 cm      **C** 21 cm      **D** 14 cm

5. **Writing to Explain** A perfect score on a quiz is 100. Mrs. Frisoli gives students 1 point for putting their name on the paper. If there are only 9 questions on the quiz, how much is each question worth? Explain how you found your answer.

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