



## SKILL 17: Dividing a Decimal by 10, 100, or 1,000

Notice how the quotient decreases and the decimal point moves when you divide by 10, 100, or 1,000.

$$372 \div 10 = 37.2$$

$$6.2 \div 10 = 0.62$$

$$0.4 \div 10 = 0.04$$

$$372 \div 100 = 3.72$$

$$6.2 \div 100 = 0.062$$

$$0.4 \div 100 = 0.004$$

$$372 \div 1,000 = 0.372$$

$$6.2 \div 1,000 = 0.0062$$

$$0.4 \div 1,000 = 0.0004$$

To divide a number by 10, 100, or 1,000, move the decimal point one place to the left for each zero in 10, 100, or 1,000. Sometimes you will need to annex zeros to show the quotient.

### Example

**Divide 43.6 by 10, 100, and 1,000.**

$$43.6 \div 10 = 4.\underline{3}6$$

10 has one zero.  
Move the decimal point one place to the left.

$$43.6 \div 10 = 4.36$$

$$43.6 \div 100 = 0.\underline{4}36$$

100 has two zeros.  
Move the decimal point two places to the left.

$$43.6 \div 100 = 0.436$$

$$43.6 \div 1,000 = 0.0\underline{4}36$$

1,000 has three zeros. Move the decimal point three places to the left. To do so, annex a zero to the left of the 4.

$$43.6 \div 1,000 = 0.0436$$

### Guided Practice

**Place the decimal point in the product.**

**Annex extra zeros if necessary.**

$$1. 48.1 \div 10 = 4\ 8\ 1 \quad 2. 48.1 \div 100 = 4\ 8\ 1 \quad 3. 48.1 \div 1,000 = 4\ 8\ 1$$

$$4. 278 \div 10 = 2\ 7\ 8 \quad 5. 278 \div 100 = 2\ 7\ 8 \quad 6. 278 \div 1,000 = 2\ 7\ 8$$

$$7. 0.9 \div 10 = \underline{\hspace{1cm}} \quad 8. 0.9 \div 100 = \underline{\hspace{1cm}} \quad 9. 0.9 \div 1,000 = \underline{\hspace{1cm}}$$

### Divide.

$$10. 0.21 \div 10 = \underline{\hspace{1cm}}$$

$$11. 82.4 \div 1,000 = \underline{\hspace{1cm}}$$

$$12. 22.4 \div 100 = \underline{\hspace{1cm}}$$

$$13. 813.6 \div 10 = \underline{\hspace{1cm}}$$

$$14. 212 \div 1,000 = \underline{\hspace{1cm}}$$

$$15. 5 \div 100 = \underline{\hspace{1cm}}$$

$$16. 10 \div 1,000 = \underline{\hspace{1cm}}$$

$$17. 0.1 \div 1,000 = \underline{\hspace{1cm}}$$

**SKILL 17: Practice****Divide.**

1.  $40.5 \div 100 =$  \_\_\_\_\_
2.  $25 \div 1,000 =$  \_\_\_\_\_
3.  $7.03 \div 100 =$  \_\_\_\_\_
4.  $0.03 \div 10 =$  \_\_\_\_\_
5.  $983 \div 100 =$  \_\_\_\_\_
6.  $809 \div 1,000 =$  \_\_\_\_\_
7.  $4,518 \div 100 =$  \_\_\_\_\_
8.  $74.41 \div 10 =$  \_\_\_\_\_
9.  $88.56 \div 10 =$  \_\_\_\_\_
10.  $0.009 \div 10 =$  \_\_\_\_\_
11.  $0.75 \div 100 =$  \_\_\_\_\_
12.  $0.57 \div 100 =$  \_\_\_\_\_
13.  $7.3 \div 1,000 =$  \_\_\_\_\_
14.  $18,693 \div 100 =$  \_\_\_\_\_
15.  $2.3 \div 100 =$  \_\_\_\_\_
16.  $320.1 \div 1,000 =$  \_\_\_\_\_
17.  $0.04 \div 100 =$  \_\_\_\_\_
18.  $58.3 \div 1,000 =$  \_\_\_\_\_
19.  $752.1 \div 10 =$  \_\_\_\_\_
20.  $0.659 \div 100 =$  \_\_\_\_\_
21.  $657 \div 10 =$  \_\_\_\_\_
22.  $0.03 \div 1,000 =$  \_\_\_\_\_
23.  $502.3 \div 100 =$  \_\_\_\_\_
24.  $2,385 \div 1,000 =$  \_\_\_\_\_
25.  $4.9 \div 10 =$  \_\_\_\_\_
26.  $0.8 \div 100 =$  \_\_\_\_\_

**Solve.**

Mrs. Hanna paid a total of \$59.00 for 10 identical strands of lights to use for a party. The 10 strands contained 1,000 lights in all.

27. How much did each strand of lights cost? \_\_\_\_\_

28. How much did each light cost? \_\_\_\_\_

**TEST PREP**

29. Divide:  $2.67 \div 100.$

*Skill 17*

- A 0.00267      C 0.0267  
 B 0.267      D 267

30. Estimate:  $3.95 \times 46.8.$  Round to make the computation easy.

*Skill 11*

- F 200      H 250  
 G 120      J 138