



## Unit 1

Name: \_\_\_\_\_

Lesson 1.1

Grade 5A

Date: \_\_\_\_\_

Place Value

Worksheet (4)

Objective(s): Multiply and divide whole numbers and decimals by 10, 100 and 1000.

## Whole Numbers

### Multiplying by 10, 100, 1000

- Rule: Just add zeros at the end.
- Examples:
  - $5 \times 10 \rightarrow 50$  (add 1 zero)
  - $23 \times 100 \rightarrow 2300$  (add 2 zeros)
  - $7 \times 1000 \rightarrow 7000$  (add 3 zeros)

### Dividing by 10, 100, 1000

- Rule: Imagine a decimal point at the end of the number and move it to the left as many places as the zeros.
- Examples:
  - $50 \div 10 \rightarrow 5$  (move 1 place left)
  - $2300 \div 100 \rightarrow 23$  (move 2 places left)
  - $7000 \div 1000 \rightarrow 7$  (move 3 places left)

## Decimals

- **The same “move the decimal” idea works for decimals too!**

### Multiplying by 10, 100, 1000

- Rule: Move the decimal point to the right.
- Examples:
  - $3.2 \times 10 \rightarrow 32$  (move 1 place right)
  - $0.47 \times 100 \rightarrow 47$  (move 2 places right)
  - $5.36 \times 1000 \rightarrow 5360$  (move 3 places right)

## Dividing by 10, 100, 1000

- Rule: Move the decimal point to the left.
- Examples:
  - $32 \div 10 \rightarrow 3.2$  (move 1 place left)
  - $47 \div 100 \rightarrow 0.47$  (move 2 places left)
  - $5360 \div 1000 \rightarrow 5.36$  (move 3 places left)

If there's a **missing number** in a multiplication or division problem, you can usually **find it by “undoing” the operation** using the opposite operation. Let me explain clearly for both whole numbers and decimals.

### 1. Whole Numbers

#### Multiplication example:

- Problem:  $\_\_\_ \times 10 = 50$
- **How to find the missing number:** Divide the answer by the number you know.
  - $50 \div 10 = 5$
- ✓ So the missing number is **5**

#### Division example:

- Problem:  $\_\_\_ \div 100 = 23$
- **How to find the missing number:** Multiply the answer by the number you divided by:
  - $23 \times 100 = 2300$
- ✓ Missing number is **2300**

### 2. Decimals

#### Multiplication example:

- Problem:  $\_\_\_ \times 100 = 4.8$
- **Solution:** Divide by 100:
  - $4.8 \div 100 = 0.048$
- ✓ Missing number is **0.048**

**Multiply the whole numbers by 10, 100, or 1000**

1.  $7 \times 10 =$  \_\_\_\_\_
2.  $45 \times 100 =$  \_\_\_\_\_
3.  $6 \times 1000 =$  \_\_\_\_\_
4.  $123 \times 10 =$  \_\_\_\_\_
5.  $9 \times 100 =$  \_\_\_\_\_

**Divide the whole numbers by 10, 100, or 1000**

1.  $500 \div 10 =$  \_\_\_\_\_
2.  $900 \div 100 =$  \_\_\_\_\_
3.  $7000 \div 1000 =$  \_\_\_\_\_
4.  $240 \div 10 =$  \_\_\_\_\_
5.  $1200 \div 100 =$  \_\_\_\_\_

**Multiply the decimals by 10, 100, or 1000**

1.  $3.4 \times 10 =$  \_\_\_\_\_
2.  $0.56 \times 100 =$  \_\_\_\_\_
3.  $2.78 \times 1000 =$  \_\_\_\_\_
4.  $0.09 \times 10 =$  \_\_\_\_\_
5.  $5.12 \times 100 =$  \_\_\_\_\_

**Divide the decimals by 10, 100, or 1000**

1.  $45 \div 10 =$  \_\_\_\_\_
2.  $7.8 \div 100 =$  \_\_\_\_\_
3.  $3.6 \div 10 =$  \_\_\_\_\_
4.  $0.48 \div 100 =$  \_\_\_\_\_
5.  $236 \div 1000 =$  \_\_\_\_\_

### Find the missing numbers

1.  $\underline{\hspace{1cm}} \times 10 = 60$
2.  $450 \div \underline{\hspace{1cm}} = 45$
3.  $\underline{\hspace{1cm}} \times 100 = 7.5$
4.  $0.84 \div \underline{\hspace{1cm}} = 0.084$
5.  $\underline{\hspace{1cm}} \div 1000 = 12$

### ✓ Tip for Students:

- Multiply  $\rightarrow$  move decimal **right** or add zeros
- Divide  $\rightarrow$  move decimal **left**
- Missing numbers  $\rightarrow$  do the **opposite operation**