

7.3 SOLVING EQUATIONS USING MULT. OR DIV.  
Guided Notes

1

 **Key Ideas**

**Multiplication Property of Equality**

**Words** When you \_\_\_\_\_ each side of an equation by the  
nonzero number, the \_\_\_\_\_ sides remain \_\_\_\_\_

**Numbers**

**Algebra**

**Multiplicative Inverse Property**

**Words** The \_\_\_\_\_ of a nonzero number  $n$  and its \_\_\_\_\_,  $\frac{1}{n}$ , is 1.

**Numbers**


**Algebra**

**EXAMPLE 1 Solving Equations Using Multiplication**

a. Solve  $\frac{w}{4} = 12$ .

→

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

 The solution is

b. Solve  $\frac{2}{7}x = 6$ .

2

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

••• The solution is

## Key Idea

### Division Property of Equality

**Words** When you \_\_\_\_\_ each \_\_\_\_\_ of an equation by the  
nonzero number, the two \_\_\_\_\_ remain \_\_\_\_\_.

**Numbers**

**Algebra**

### EXAMPLE 2 Solving an Equation Using Division

Solve  $5b = 65$ .

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

••• The solution is

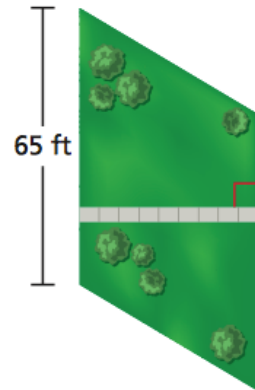
**EXAMPLE 3** Real-Life Application

3

The area of the parallelogram-shaped courtyard is 2730 square feet.  
What is the length of the sidewalk?

The height of the parallelogram represents the length of the sidewalk.

- Use the \_\_\_\_\_ for \_\_\_\_\_ of a \_\_\_\_\_
- Substitute \_\_\_\_\_ for \_\_\_\_\_ and \_\_\_\_\_ for \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



So, the sidewalk is