

## Implied Multiplication

AB-WIA 1

**Instructions:** Since multiplication is implied in Algebra, we often don't need to actually write the times symbol '×'. Re-write these algebraic equation without the times symbol.

1  $2 \times b = 4 - x \times y$   
 $2b = 4 - xy$

2  $\frac{a \times b}{5} = 2 \times x$

3  $x \times y = \frac{a \times b}{d \times c}$

4  $7 + h = 5 \times g + b$

5  $(x + 2) \times (m \times k) = p$

6  $\frac{a \times b \times c}{x + y} = 10$

7  $y = m \times x + b$

8  $2 \times (x + 1) = 6 \times x$

9  $3 \times z = \frac{x \times y}{x + y}$

10  $\frac{7 \times a \times b}{3 \times c} = \frac{2 \times a}{5 \times b}$

## What Is Algebra?

1 Fill in the blank.

An \_\_\_\_\_ is a mathematical statement that two things are equal.

2 Fill in the blank.

In Algebra, when a number isn't known, we use a \_\_\_\_\_ in its place.

3 Fill in the blank.

Figuring out the value of an unknown in an equation is called \_\_\_\_\_ the equation.

4 Fill in the blank.

In Algebra, the letters used to represent unknown values are called \_\_\_\_\_ because their values can change or vary.

5 Fill in the blank.

\_\_\_\_\_ is the default operation in Algebra.

6 Circle to indicate if this statement is true or false.

**A symbol CAN'T be used to represent two different values in the same equation at the same time.**

**TRUE or FALSE**

7 Since multiplication is implied in Algebra, we often don't need to actually write the times symbol '×'. Re-write this algebraic equation without the times symbol.

$$a \times b = 4 \times c$$

8 To show that you can identify implied multiplication, re-write this algebraic equation using the times symbol wherever multiplication is implied.

$$3(bc) = 2d$$

## Implied Multiplication

AB-WIA 1

**Instructions:** Since multiplication is implied in Algebra, we often don't need to actually write the times symbol '×'. Re-write these algebraic equation without the times symbol.

$$\begin{aligned} 1 \quad 2 \times b &= 4 - x \times y \\ 2b &= 4 - xy \end{aligned}$$

$$\begin{aligned} 2 \quad \frac{a \times b}{5} &= 2 \times x \\ \frac{ab}{5} &= 2x \end{aligned}$$

$$\begin{aligned} 3 \quad x \times y &= \frac{a \times b}{d \times c} \\ xy &= \frac{ab}{dc} \end{aligned}$$

$$\begin{aligned} 4 \quad 7 + h &= 5 \times g + b \\ 7 + h &= 5g + b \end{aligned}$$

$$\begin{aligned} 5 \quad (x + 2) \times (m \times k) &= p \\ (x + 2)(mk) &= p \end{aligned}$$

$$\begin{aligned} 6 \quad \frac{a \times b \times c}{x + y} &= 10 \\ \frac{abc}{x + y} &= 10 \end{aligned}$$

$$\begin{aligned} 7 \quad y &= m \times x + b \\ y &= mx + b \end{aligned}$$

$$\begin{aligned} 8 \quad 2 \times (x + 1) &= 6 \times x \\ 2(x + 1) &= 6x \end{aligned}$$

$$\begin{aligned} 9 \quad 3 \times z &= \frac{x \times y}{x + y} \\ 3z &= \frac{xy}{x + y} \end{aligned}$$

$$\begin{aligned} 10 \quad \frac{7 \times a \times b}{3 \times c} &= \frac{2 \times a}{5 \times b} \\ \frac{7ab}{3c} &= \frac{2a}{5b} \end{aligned}$$

## What Is Algebra?

1 Fill in the blank.

An equation is a mathematical statement that two things are equal.

2 Fill in the blank.

In Algebra, when a number isn't known, we use a symbol in its place. (or letter)  
(or variable)

3 Fill in the blank.

Figuring out the value of an unknown in an equation is called solving the equation.

4 Fill in the blank.

In Algebra, the letters used to represent unknown values are called variables because their values can change or vary.

5 Fill in the blank.

Multiplication is the default operation in Algebra.

6 Circle to indicate if this statement is true or false.

A symbol CAN'T be used to represent two different values in the same equation at the same time.

TRUE or FALSE

7 Since multiplication is implied in Algebra, we often don't need to actually write the times symbol '×'. Re-write this algebraic equation without the times symbol.

$$a \times b = 4 \times c$$

$$ab = 4c$$

8 To show that you can identify implied multiplication, re-write this algebraic equation using the times symbol wherever multiplication is implied.

$$3(bc) = 2d$$

$$3 \times (b \times c) = 2 \times d$$