

# Multiplication and Division Equations

You can use division to solve multiplication equations.

Solve:  $12s = 240$

To find the value of  $s$ ,  
divide both sides of the equation by 12.

$$\frac{12s}{\div 12} = \frac{240}{\div 12}$$

$$s = 20$$

Check your answer by substituting 20 for  $s$   
in the original equation.

$$\begin{aligned} 12s &= 240 \\ 12 \times 20 &= 240 \\ 240 &= 240 \leftarrow \text{It checks.} \end{aligned}$$

You can use multiplication to solve division equations.

Solve:  $\frac{t}{3} = 4.8$

To find the value of  $t$ ,  
multiply both sides of the equation by 3.

$$\begin{aligned} \frac{t}{3} &= 4.8 \\ \frac{t}{3} \times 3 &= 4.8 \times 3 \\ t &= 14.4 \end{aligned}$$

Check your answer by substituting 14.4 for  $t$   
in the original equation.

$$\begin{aligned} \frac{t}{3} &= 4.8 \\ \frac{14.4}{3} &= 4.8 \\ 4.8 &= 4.8 \leftarrow \text{It checks.} \end{aligned}$$

Solve each equation. Show your work. Check your answer.

1.  $8d = 96$

$$d = \underline{\hspace{2cm}}$$

2.  $2.5m = 75$

$$m = \underline{\hspace{2cm}}$$

3.  $\frac{1}{2}k = 3.2$

$$k = \underline{\hspace{2cm}}$$

4.  $0.7y = 42$

$$y = \underline{\hspace{2cm}}$$

5.  $n \div 15 = 60$

$$n = \underline{\hspace{2cm}}$$

6.  $w \div 7 = 56$

$$w = \underline{\hspace{2cm}}$$

7.  $a \div \frac{3}{4} = \frac{1}{2}$

$$a = \underline{\hspace{2cm}}$$

8.  $v \div 0.8 = 72$

$$v = \underline{\hspace{2cm}}$$

9.  $30b = 600$

$$b = \underline{\hspace{2cm}}$$