



One-Step Equations: Multiplication & Division

Procedure:

Goal: To isolate the variable by doing the reverse operation

1. If the variable is being multiplied by a number, then divide both sides of the equations by that number (in the aim of isolating the variable).
2. Similarly, if the variable is being divided by a number, then multiply both sides of the equation by that number.

Examples:

$$\begin{array}{l} 7x = 14 \\ \frac{7x}{7} = \frac{14}{7} \\ x = 2 \end{array}$$
$$\begin{array}{l} \frac{y}{5} = 3 \\ \frac{y}{5} \cdot 5 = 3 \cdot 5 \\ y = 15 \end{array}$$

Practice: Solve the following equations.

1. $4x = 20$

2. $\frac{z}{6} = 3$

3. $5b = -5$

4. $7 = \frac{b}{11}$

5. $-100 = -4g$

6. $\frac{k}{4} = -3$

7. $72 = -18j$

8. $-1 = \frac{n}{-3}$

9. $\frac{v}{-6} = 20$

10. $-200 = -10a$

11. $\frac{k}{35} = -70$

12. $126 = 7t$