

Lesson 5.6 Solving 1-Step Equations: Multiplication & Division

Division Property of Equality

If you divide each side of an equation by the same nonzero number, the two sides remain equal.

$$3y = 21$$

To undo multiplication by 3, divide by 3.

$$\frac{3y}{3} = \frac{21}{3}$$

$$y = 7$$

Multiplication Property of Equality

If you multiply each side of an equation by the same number, the two sides remain equal.

$$\frac{a}{4} = 4$$

To undo division by 4, multiply by 4.

$$\frac{a}{4} \times \frac{4}{1} = 5 \times 4$$

$$a = 20$$

Write the operation that would undo the operation in each equation.

a

1. $5 \times n = 40$ _____

2. $\frac{x}{2} = 8$ _____

b

$\frac{y}{5} = 80$ _____

$a \times 7 = 42$ _____

Solve each equation.

a

3. $3 \times a = 9$ _____

4. $\frac{x}{3} = 3$ _____

5. $5 \times b = 10$ _____

6. $\frac{m}{3} = 1$ _____

7. $4 \times n = 1$ _____

8. $n \times 15 = 30$ _____

9. $\frac{n}{18} = 2$ _____

10. $\frac{n}{2} = 20$ _____

11. $5 \times b = 30$ _____

12. $\frac{n}{4} = 1$ _____

b

$\frac{x}{5} = 5$ _____

$n \times 4 = 4$ _____

$\frac{b}{8} = 2$ _____

$8 \times n = 20$ _____

$\frac{n}{4} = 5$ _____

$\frac{n}{4} = 10$ _____

$n \times 3 = 18$ _____

$\frac{n}{16} = 1$ _____

$\frac{b}{5} = 30$ _____

$\frac{b}{2} = 2$ _____

c

$\frac{n}{4} = 3$ _____

$3 \times y = 24$ _____

$4 \times a = 20$ _____

$\frac{x}{5} = 2$ _____

$\frac{b}{3} = 27$ _____

$n \times 12 = 36$ _____

$n \times 2 = 20$ _____

$n \times 3 = 3$ _____

$n \times 8 = 24$ _____

$n \times 6 = 48$ _____