Lesson 5.6 Solving I-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.

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.

O

1.
$$5 \times n = 40$$

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

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$$\frac{Y}{5} = 80$$

$$a \times 7 = 42$$

Solve each equation.

a

3.
$$3 \times a = 9$$

b

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

C

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

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

$$3 \times y = 24$$

5.
$$5 \times b = 10$$

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

$$4 \times a = 20$$

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

$$8 \times n = 20$$

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

$$\frac{n}{4} = 5$$
 ______.

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

8.
$$n \times 15 = 30$$

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

$$n \times 12 = 36$$

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

$$n \times 3 = 18$$

$$n \times 2 = 20$$

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

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

$$n \times 3 = 3$$

11.
$$5 \times b = 30$$

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

$$n \times 8 = 24$$

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

$$n \times 6 = 48$$

Chapter 5, Lesson 6

Spectrum Math Grade 6

Expressions and Equations