

Lesson 5 Reteach

Solve Multi-Step Equations

Example 1

Solve $2(4a - 5) = 30$.

$$2(4a - 5) = 30$$

$$8a - 10 = 30$$

$$8a - 10 + 10 = 30 + 10$$

$$8a = 40$$

$$\frac{8a}{8} = \frac{40}{8}$$

$$a = 5$$

Write the equation.

Distributive Property

Addition Property of Equality

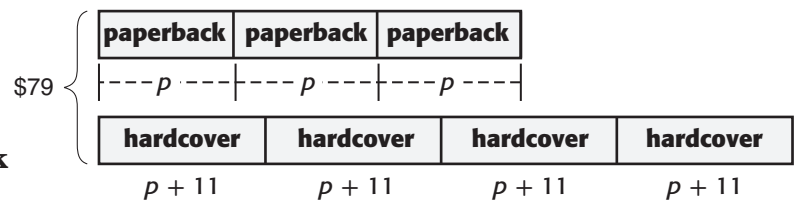
Simplify.

Division Property of Equality

Simplify.

Example 2

BOOKS Roland has 3 paperback books and 4 hardcover books. Each hardcover book is worth \$11 more than each paperback book. If the value of all of his books is \$79, what is the cost of one paperback book?



Write an equation to represent the bar model.

$$3p + 4(p + 11) = 79$$

$$3p + 4p + 44 = 79$$

$$7p + 44 = 79$$

$$7p + 44 + (-44) = 79 + (-44)$$

$$7p = 35$$

$$\frac{7p}{7} = \frac{35}{7}$$

$$p = 5$$

Write the equation.

Distributive Property

Simplify.

Addition Property of Equality

Simplify.

Division Property of Equality

Simplify.

So, the cost of one paperback book is \$5.

Exercises

Solve each equation. Check your solution.

1. $2(3b - 1) = 40$
7

2. $49 = -7(t + 1)$
-8

3. $5(1 - n) = 75$
-14

4. $4(x - 2) = 3(x - 3)$
-1

5. $-5(p + 2) = 2(2p - 15) + p$
2

6. $4z - 6 = 6(z + 2) + 8$
-13