

**Lesson 5.5** Solving 1-Step Equations: Addition & Subtraction**Subtraction Property of Equality**

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

$$x + 12 = 20$$

To undo the addition of 12, subtract 12.

$$x + 12 - 12 = 20 - 12$$

$$x + 0 = 8$$

$$x = 8$$

**Addition Property of Equality**

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

$$n - 3 = 15$$

To undo the subtraction of 3, add 3.

$$n - 3 + 3 = 15 + 3$$

$$n - 0 = 18$$

$$n = 18$$

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

**a**

1.  $x - 4 = 3$  \_\_\_\_\_

2.  $y + 7 = 25$  \_\_\_\_\_

**b**

$8 = b + 4$  \_\_\_\_\_

$3 = a - 7$  \_\_\_\_\_

Solve each equation.

**a**

3.  $a - 4 = 2$  \_\_\_\_\_

4.  $7 = x - 4$  \_\_\_\_\_

5.  $z - 7 = 5$  \_\_\_\_\_

6.  $x + 7 = 10$  \_\_\_\_\_

7.  $b + 4 = 4$  \_\_\_\_\_

8.  $z - 10 = 20$  \_\_\_\_\_

**b**

$y + 5 = 9$  \_\_\_\_\_

$b + 7 = 19$  \_\_\_\_\_

$m - 5 = 5$  \_\_\_\_\_

$x - 3 = 18$  \_\_\_\_\_

$b - 8 = 12$  \_\_\_\_\_

$z + 5 = 20$  \_\_\_\_\_

**c**

$x - 3 = 14$  \_\_\_\_\_

$y + 5 = 5$  \_\_\_\_\_

$n + 1 = 1$  \_\_\_\_\_

$x + 0 = 9$  \_\_\_\_\_

$n + 8 = 12$  \_\_\_\_\_

$x - 2 = 8$  \_\_\_\_\_

Write and solve the equation for each problem below.

9. Kelley went to the movies. She took 20 dollars with her. When she came home, she had 6 dollars. How much money did she spend? \_\_\_\_\_

10. There are 27 students in Mrs. Yuen's homeroom. Twelve of them have home computers. How many students do not have home computers?  
\_\_\_\_\_

**9.****10.**