

**Worksheet 4-14: Solving Equations with Variables on Both Sides**

Solve.

1.  $5z + 4 = 3z - 6$

2.  $4y - 23 = 10 + y$

3.  $9 - 4m = 2m - 3$

4.  $5x - 4 = 7x + 20$

5.  $8 - x = x - 4$

6.  $-3a + 1 = 2a + 11$

7.  $4w + 1 = 9w - 19$

8.  $x - 3 = 5 - x$

<b>9.</b> $3(2 - k) = 10 + k$	<b>10.</b> $3(x + 6) = 2(x - 1)$
<b>11.</b> $4(3g - 5) = -2(46 + 3g)$	<b>12.</b> $2y - 3(-1) = 6 - 4y$
<b>13.</b> $3(x - 1) + 1 = 5(x - 2)$	<b>14.</b> $1 - (2 + w) = w + 5$
<b>15.</b> $2m - 5 = -3(m - 2) - 8$	<b>16.</b> $-3(a + 3) = 2a + 2(9 - a)$

**Answers:** 9. -1; 10. -20; 11. -4; 12. 0.5 or  $\frac{1}{2}$ ; 13. 4; 14. -3; 15. 0.6 or  $\frac{3}{5}$ ; 16. -9