

Practice**Solving Equations with the Variable on Both Sides**

Solve each equation. Then check your solution.

1. $4x - 9 = 7x + 12$

2. $6y - 3 = 6y + 8$

3. $8m + 13 = 13 + 8m$

4. $8n - 13 = 13 - 8n$

5. $\frac{x + 3}{2} = 15$

6. $\frac{2r - 3}{3} = \frac{3}{5}$

7. $1.4f + 1.1 = 8.3 - f$

8. $0.4r - 1.2 = 0.3r + 0.6$

9. $\frac{1}{2}d + \frac{3}{8} = -2d$

10. $\frac{3}{5}x - 2 = 6 + \frac{1}{4}x$

11. $\frac{5}{2}t - t = 3 + \frac{3}{2}t$

12. $4.2z = -4(0.6z - 1.2)$

13. $-3(b - 8) - 5 = 9(b + 2) + 1$

14. $8p - 5(p + 3) = (7p - 1)3$

15. $-4(2 - 3x) = 7 - 2(x - 3)$

16. $2(a - 8) + 7 = 5(a + 2) - 3a - 19$

Write an equation and solve. Then check your solution.

18. Twice a number increased by 12 is equal to 31 less than three times the number. Find the number.

19. Eight minus two times a number is equal to the number plus 17. Find the number.

20. Twice the greater of two consecutive odd integers is 13 less than three times the lesser. Find the integers.

21. The perimeter of a rectangle is 24 inches. Find the dimensions if its length is 3 inches greater than its width.