

Evaluate each expression for  $x = 5$ .

3.  $\frac{5}{3}(3x - 6) - (6 - 4x)$

4.  $3(x^2 - 4) + 7(x - 2)$

5.  $x - 2x + 3x - 4x + 5x$

Simplify each expression.

6.  $a^2 + a + a^2$

7.  $2x + 3y - 5x + 2y$

8.  $5(a - 2b) - 3(a - 2b)$

9.  $3[2(x - 3) + 2] + 5(x - 3)$

Solve each equation.

10.  $4y - 6 = 2y + 8$

11.  $3(2z + 1) = 35$

12.  $5(3w - 2) - 7 = 23$

13.  $t - 2(3 - 2t) = 2t + 9$

14.  $5(s - 12) - 24 = 3(s + 2)$

15.  $7(3 - 0.5k) = 3k - 5$

Solve each equation for  $x$ . State any restrictions.

16.  $ax - bx = 2a$

17.  $\frac{x}{c} + c = 4c$

18.  $\frac{x-5}{a} + 1 = b$

19.  $ax + 2 = bx + c$

21. **Savings** Briana and her sister Molly both want to buy the same model bicycle. Briana needs \$73 more before she can afford the bike. Molly needs \$65 more. If they combine their money, they will have just enough to buy one bicycle that they could share. What is the cost of the bicycle?

**Solve each inequality or equation. Graph the solution.**

23.  $3x + 17 \geq 5$

24.  $25 - 2x < 11$

25.  $7t > 4t + 3(1 - t)$

26.  $\frac{3}{8}x < -6$  or  $5x > 2$

27.  $2 < 10 - 4d < 6$

28.  $4 - x = |2 - 3x|$

29.  $|4x + 4| = 8x + 16$

30.  $|5 - p| \leq 2$

31.  $5|3w + 2| - 3 > 7$