1) \{(-3, 7), (0, 4), (4, -3), (8, -2)\}

Determine if the graph represents \( y \) as a function of \( x \).

2) \[ \text{Graph of the function.} \]

3) \[ \text{Graph of the function.} \]

Evaluate the function.

4) If \( f(x) = x^2 - 4x - 6 \), find \( f(3) \).

5) If \( g(x) = 2x - 5 \), find \( g(a + 1) \).

6) \[ \text{Graph of the function.} \]

7) List the two values of \( x \) for which \( f(x) = 0 \).

8) Find the domain and range of \( f \).
Graph the linear function.

9) \(-4x - 8y = 16\)

10) \(h(x) = \frac{3}{4}x + 3\)

11) \(f(x) = 4\)

Solve the problem algebraically.

12) The total cost in dollars for a certain company to produce \(x\) empty jars to be used by a jelly producer is given by the polynomial equation \(C(x) = 0.2x + 22,000\). What is the slope in this model? Describe what this means in terms of rate of change.

13) Passing through (10, 74) and (8, 60)

14) Passing through (5, -2) and parallel to the line whose equation is \(y = -9x + 6\).

15) Passing through (5, 5) and perpendicular to the line whose equation is \(y = \frac{1}{7}x + 7\).

Solve the system by graphing.

16) \(3x + y = -4\)
    \(4x + 3y = 3\)

Solve the system by the substitution method or the addition method. If the system has no solution or infinitely many solutions, use set notation to express the solution set.

17) \(3x + 2y = 26\)
    \(4x + 4y = 44\)

18) A chemist needs 50 milliliters of a 33% solution but has only 31% and 36% solutions available. Find how many milliliters of each that should be mixed to get the desired solution.

19) \(x + y + z = 4\)
    \(x - y + 3z = 16\)
    \(2x + y + z = 6\)

20) Find the values of \(a\), \(b\), and \(c\) such that the graph of the quadratic equation \(y = ax^2 + bx + c\) passes through the points (1, 5), (2, 7), and (4, 23).