1. Determine whether the relation is a function.
   (0, 4), (1, 4), (2, 5), (3, 6), (4, 6)

2. What is the range of the function in the graph?

3. What is the domain of the function in the graph?

Tell whether the function is linear. Then evaluate the function when $x = -6$.

4. $f(x) = 4 + x$
5. Find the slope of the line.

\[ y = 5x + 2 \]

6. Tell whether Line 1 and Line 2 are parallel, perpendicular, or neither.
   Line 1 passes through (10, 7) and (13, 9)
   Line 2 passes through (–4, 3) and (–1, 5)

7. Line 1 contains (2, –4) and (0, 2). Line 2 contains (–4, 5) and (–1, 6). Are the lines parallel, perpendicular, or neither?

Graph the equation.

8. \[ x - y = 3 \]
9. \( y = 1 \)

10. Find the slope and \( y \)-intercept of the graph of \( 3x - 7y = 42 \).

11. Find the slope and \( y \)-intercept of the graph of \( 4x - 3y = 36 \).

12. Which equation represents a line that passes through the point \((-5, 5)\) and has slope \(-3\)?
   a. \( y = 3x - 10 \)
   b. \( y = -3x + 10 \)
   c. \( y = -3x - 10 \)
   d. \( y = 3x + 10 \)

**Write an equation of the line that is parallel to the given line and passes through the given point. Express your answer in slope-intercept form.**

13. \( y = -2x + 6; \ (0, -2) \)

14. Find the slope-intercept equation of the line passing through the points \((-5, -3)\) and \((-2, 6)\).

15. A rental car costs $25 plus a fixed charge per mile driven. The total charge for 210 miles of use was $67. Write an equation for the cost, \( C \) (in dollars), in terms of the miles driven, \( x \).

16. A rental car costs $25 plus a fixed charge per mile driven. The total charge for 320 miles of use was $89. Write an equation for the cost, \( C \) (in dollars), in terms of the miles driven, \( x \).

17. A rental car costs a minimum charge plus a fixed charge per mile driven. One customer was charged $60 for 160 miles of use. Another customer drove 280 miles and paid $90. Write an equation relating the total cost, \( C \) (in dollars), to the miles driven, \( x \).

18. Write the standard form of the equation of the line that passes through the point \((4,1)\) and is parallel to the line \(3x + 2y = 5\).
   a. \( 3x - 2y = -5 \)
   b. \( 3x + 2y = 11 \)
   c. \( 4x + y = 5 \)
   d. \( 3x + 2y = 14 \)
19. For the graph below, tell whether \( y \) varies directly with \( x \). If so, give an equation for the graph.

20. Graph \( y = \frac{3}{2}x + 3 \).