Review of Linear Equations

Sketch the graph of each line.

1) \( y = -2x - 2 \)

2) \( y = -x - 2 \)

3) \( 2x - 5y = 5 \)

4) \( x = -1 \)

5) \( 32 - 2x = 8y \)

6) \( 0 = x + \frac{1}{4}y + \frac{1}{2} \)
Write the standard form of the equation of each line given the slope and y-intercept.

7) Slope = $-\frac{3}{5}$, y-intercept = 5

8) Slope = 9, y-intercept = 4

Write the standard form of the equation of each line.

9) $y = -\frac{7}{5}x + 1$

10) $y = \frac{3}{2}x + 5$

11) $y + 4 = -7(x - 1)$

12) $y + 1 = -(x + 3)$

13) $-10x - y = -5$

14) $-4 - 2y = -x$

Write the standard form of the equation of the line through the given point with the given slope.

15) through: $(4, -2)$, slope = $-1$

16) through: $(-2, 4)$, slope = $-\frac{1}{7}$

Write the standard form of the equation of the line through the given points.

17) through: $(-3, 2)$ and $(0, -1)$

18) through: $(0, 4)$ and $(-1, -1)$

Write the standard form of the equation of the line described.

19) through: $(2, 0)$, parallel to $y = \frac{2}{3}x$

20) through: $(-2, 4)$, parallel to $y = -\frac{3}{2}x + 3$

21) through: $(2, 4)$, perp. to $y = -\frac{2}{7}x - 5$

22) through: $(5, 0)$, perp. to $y = -x + 5$
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Sketch the graph of each line.

1) \( y = -2x - 2 \)

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3) \( 2x - 5y = 5 \)

4) \( x = -1 \)

5) \( 32 - 2x = 8y \)

6) \( 0 = x + \frac{1}{4}y + \frac{1}{2} \)
Write the standard form of the equation of each line given the slope and y-intercept.

7) Slope = \(-\frac{3}{5}\), y-intercept = 5
   \[3x + 5y = 25\]

Write the standard form of the equation of each line.

9) \(y = -\frac{7}{5}x + 1\)
   \[7x + 5y = 5\]

11) \(y + 4 = -7(x - 1)\)
    \[7x + y = 3\]

13) \(-10x - y = -5\)
    \[10x + y = 5\]

Write the standard form of the equation of the line through the given point with the given slope.

15) through: \((4, -2)\), slope = \(-1\)
   \[x + y = 2\]

Write the standard form of the equation of the line through the given points.

17) through: \((-3, 2)\) and \((0, -1)\)
   \[x + y = -1\]

Write the standard form of the equation of the line described.

19) through: \((2, 0)\), parallel to \(y = \frac{2}{3}x\)
    \[2x - 3y = 4\]

21) through: \((2, 4)\), perp. to \(y = -\frac{2}{7}x - 5\)
    \[7x - 2y = 6\]

22) through: \((5, 0)\), perp. to \(y = -x + 5\)
    \[x - y = 5\]