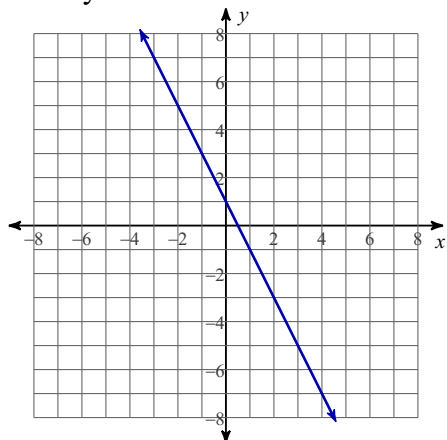


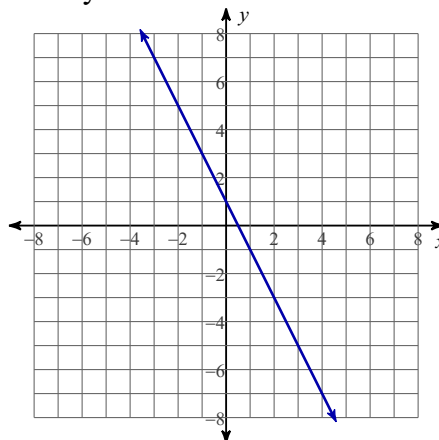
HW15: Point-Slope Form

You may complete this homework on this paper.

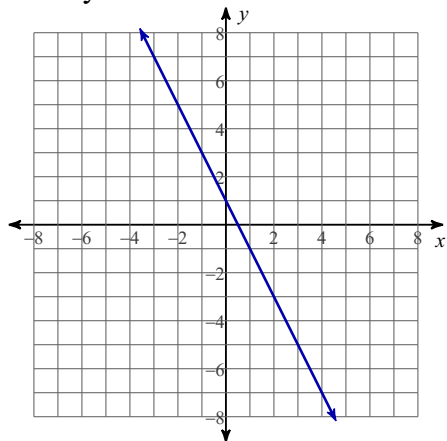
- 1) The graph of $y = -2x + 1$ is shown below. Is $(4, -7)$ a solution to this equation? Why or why not?



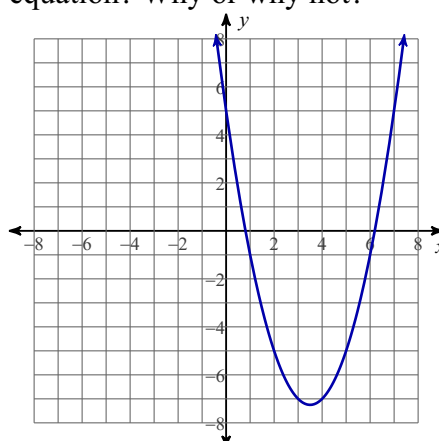
- 2) The graph of $y = -2x + 1$ is shown below. Is $(4, 8)$ a solution to this equation? Why or why not?



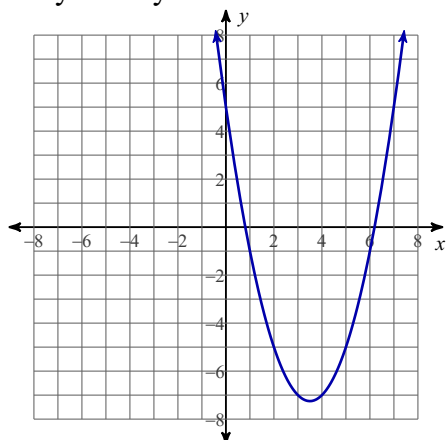
- 3) The graph of $y = -2x + 1$ is shown below. Is $(-3, 2)$ a solution to this equation? Why or why not?



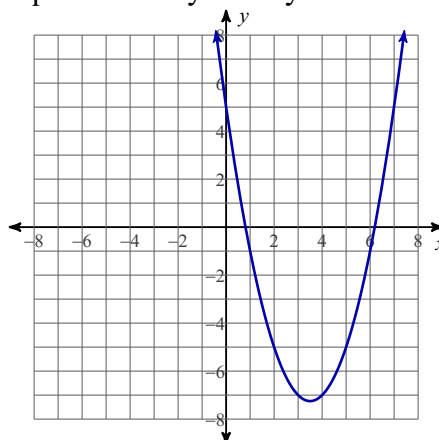
- 4) The graph of $y = x^2 - 7x + 5$ is shown below. Is $(4, -7)$ a solution to this equation? Why or why not?



- 5) The graph of $y = x^2 - 7x + 5$ is shown below. Is $(0, 1)$ a solution to this equation? Why or why not?

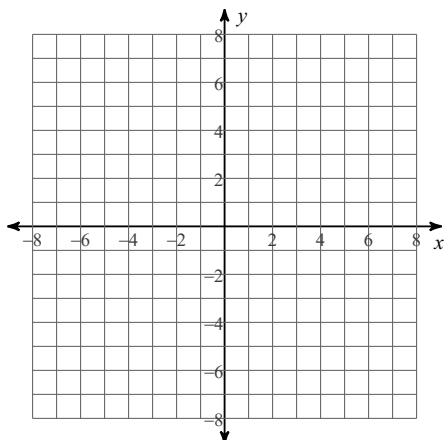


- 6) The graph of $y = x^2 - 7x + 5$ is shown below. Is $(-2, -5)$ a solution to this equation? Why or why not?

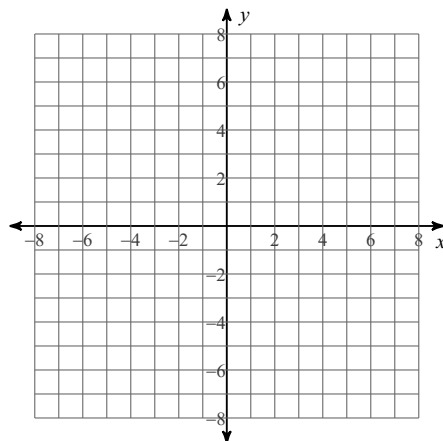


Graph the line.

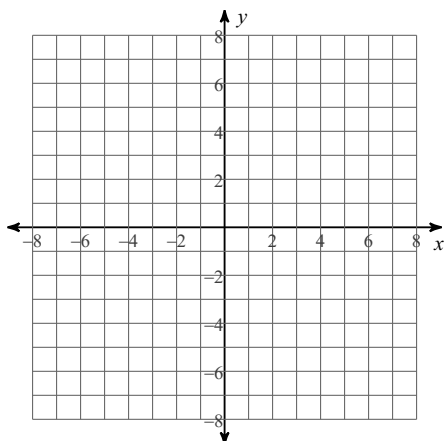
7) Through $(9, 2)$ with slope $m = -1$



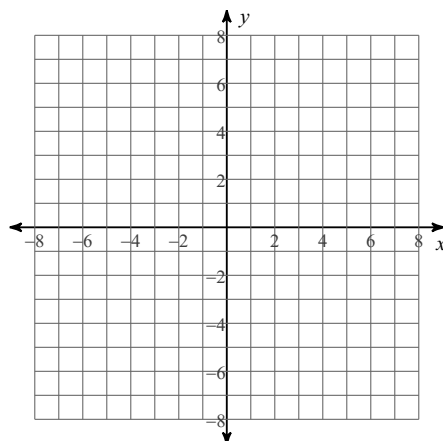
8) Through $(-2, 4)$ with slope $m = -\frac{1}{2}$



9) Through $(0, 2)$ with slope $m = -3$



10) Through $(3, 4)$ with slope $m = 2$



Identify the point and the slope.

11) $y - 3 = 4(x - 2)$

12) $y - 1 = -\frac{2}{3}(x + 0)$

13) $y - 5 = \frac{3}{5}(x - 8)$

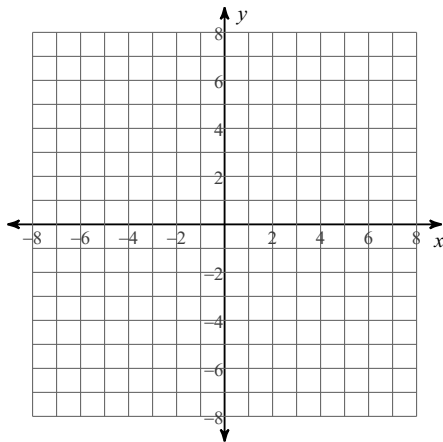
14) $y - 6 = -\frac{4}{3}(x - 9)$

15) $y + 3 = -3\left(x - \frac{1}{3}\right)$

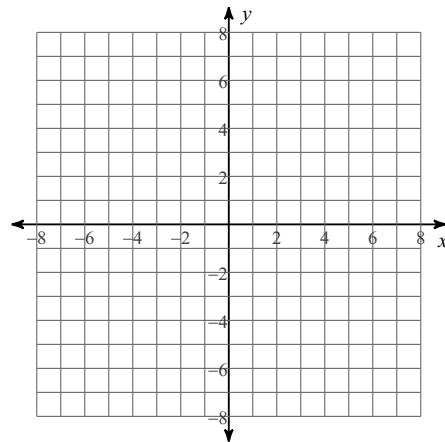
16) $y + 7 = \frac{2}{7}(x - 1)$

Identify the point and slope, and graph the line.

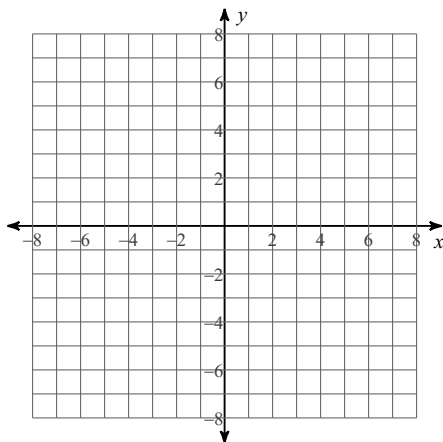
17) $y - 3 = 2(x - 7)$



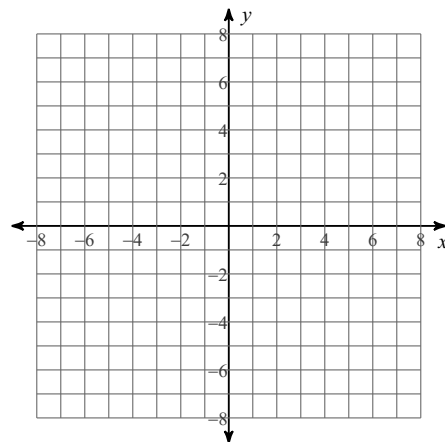
18) $y + 3 = -5(x + 1)$



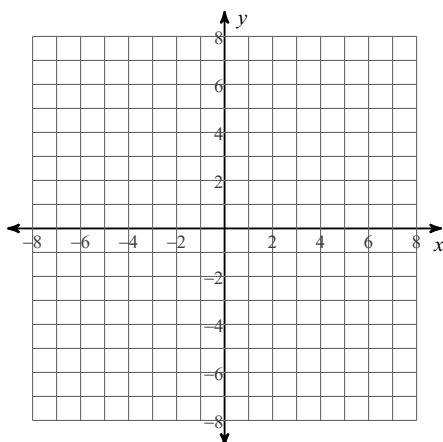
19) $y + 2 = -\frac{1}{2}(x - 6)$



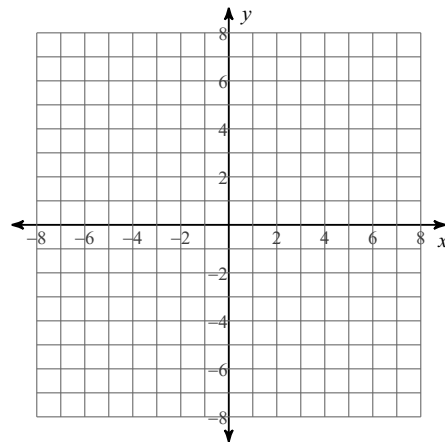
20) $y - 3 = \frac{1}{2}(x + 8)$



21) $y - 5 = -\frac{2}{3}(x + 4)$



22) $y + 7 = 4(x - 3)$



Write the point-slope form of the equation of the line described.

23) through: $(5, -2)$, slope = $-\frac{2}{5}$

24) through: $(3, 2)$, slope = -4

25) through: $(-3, 4)$, slope = -2

26) through: $(4, -4)$, slope = $-\frac{3}{2}$

27) through: $(0, -5)$, slope = 6

28) through: $(-4, 4)$, slope = $-\frac{1}{4}$