Algebra 1   Name_____

Slope and Lines Packet   Date_____ Period_____

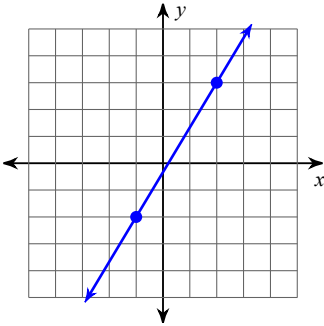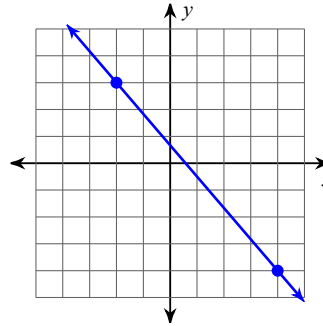**Find the slope of each line using the points on the graph.**

1)

2)

Find the slope of the line passing through each pair of points. Use the slope formula.

3) $(6, -8), (-6, -11)$ 4) $(-8, -5), (13, -14)$

Write the equation in slope-intercept form. Then, identify the slope and y-intercept for the line.

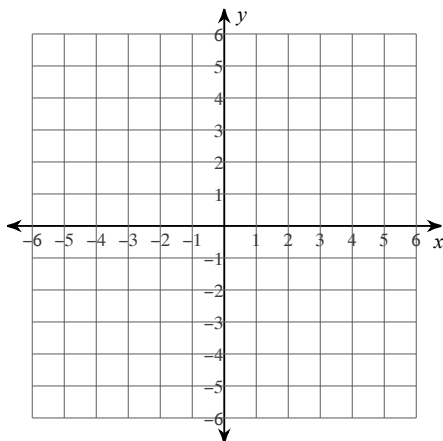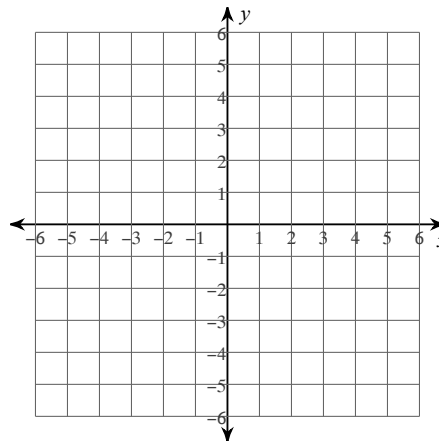5) $x - 6 = 3y$ 6) $5x = y$

7) $3x = -y - 1$ 8) $-4x = -y - 3$

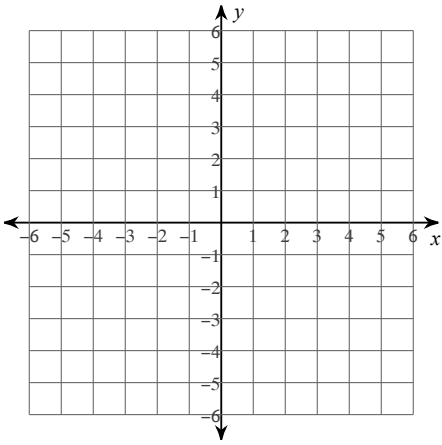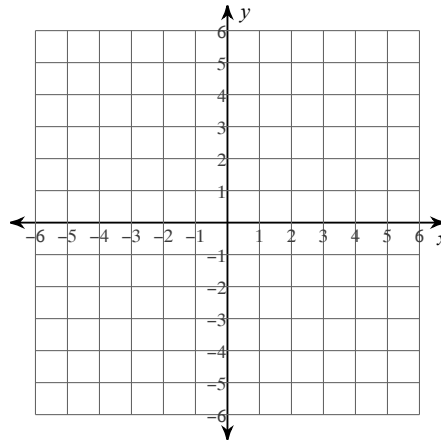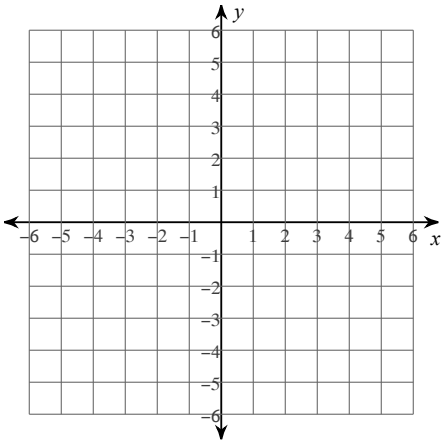**Sketch the graph of each line.**

9) $y = -\dfrac{5}{2}x + 2$
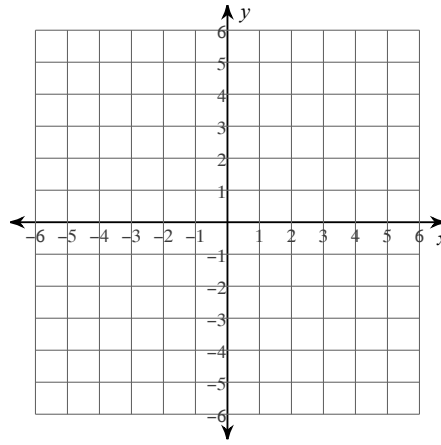

10) $y = 2x - 4$
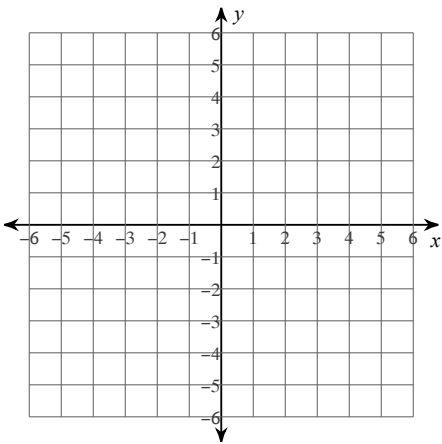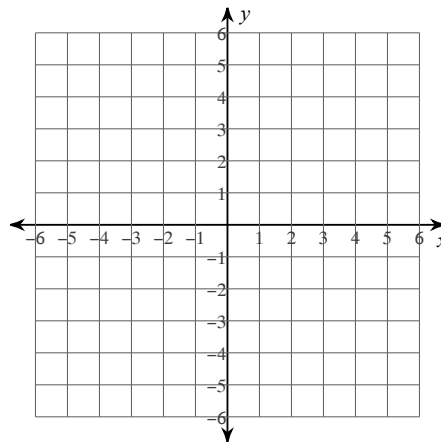
11) $y = -x - 1$

12) $4x - y = -2$

13) $x = -2$

14) $y = 4$

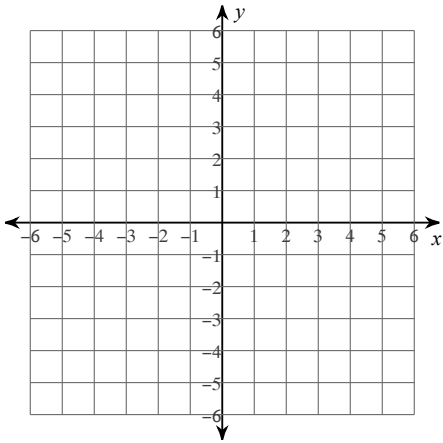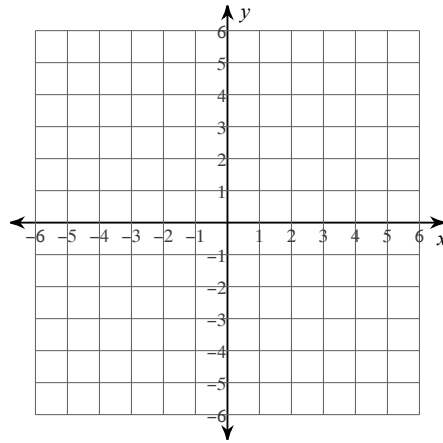15) $x + 2y = -6$

16) x-intercept $= 4$, y-intercept $= -3$

17) $x = -4y + 12$

18) $x - 2y = -6$

Write the equation in slope-intercept form using the point-slope form of the equation for the line.

19) $y + 5 = \dfrac{1}{2}(x + 4)$

20) $y + 5 = -8(x - 2)$

Write an equation in slope-intercept form for the line that contains the given point and the given slope.

21) through: $(1, -1)$, slope $= 4$

22) through: $(-2, 5)$, slope $= -1$

23) through: $(3, 0)$, slope $= \dfrac{1}{2}$

24) through: $(-1, -1)$, slope $= \dfrac{1}{3}$

25) through: $(-1, -1)$, slope = 3

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

Write the equation in slope-intercept form for the line passing through the given points.

27) through: $(-2, -3)$ and $(-4, -1)$

28) through: $(-4, -5)$ and $(0, 0)$

29) through: $(0, -5)$ and $(-5, -2)$

30) through: $(-3, -1)$ and $(3, -3)$

31) through: $(0, 0)$ and $(1, 0)$

32) through: $(-1, 4)$ and $(-1, 5)$