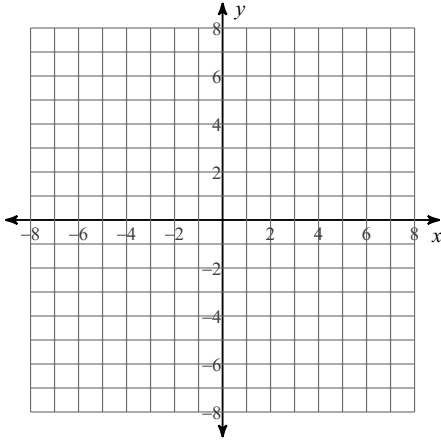


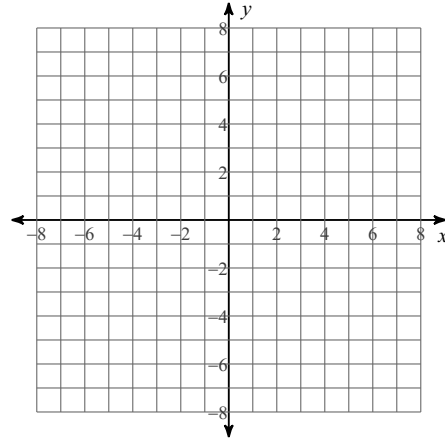
## Extra Credit: Point-Slope Form

Sketch the graph of each line.

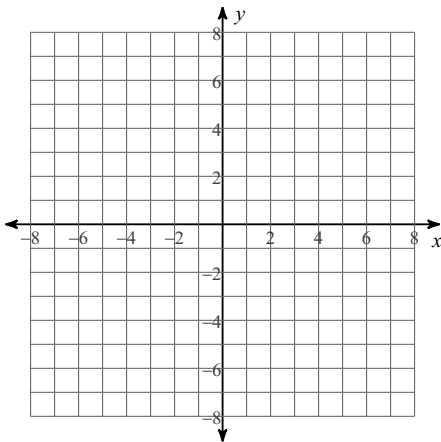
1)  $y - 1 = 3(x + 2)$



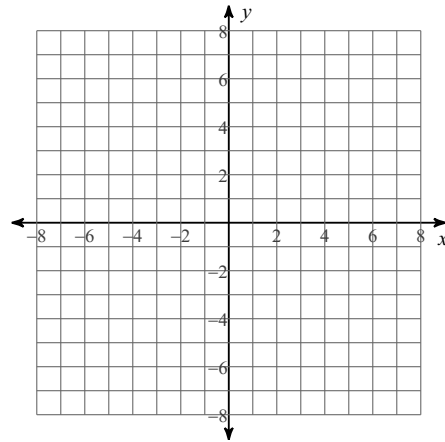
2)  $y - 4 = -2(x - 1)$



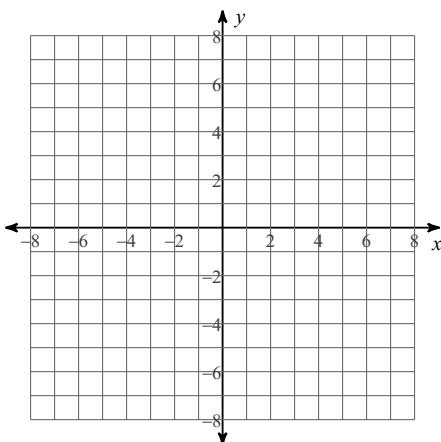
3)  $y + 2 = -\frac{1}{2}(x - 3)$



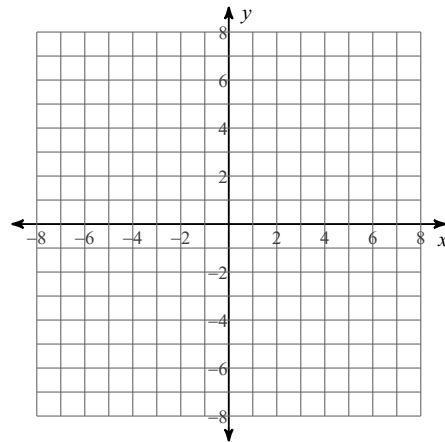
4)  $y + 5 = x - 4$



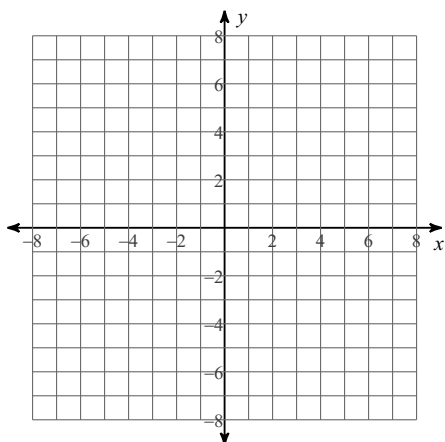
5)  $y - 6 = \frac{1}{3}(x + 1)$



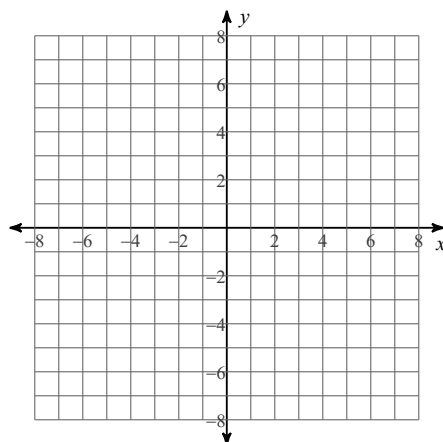
6)  $y - 4 = -2(x + 8)$



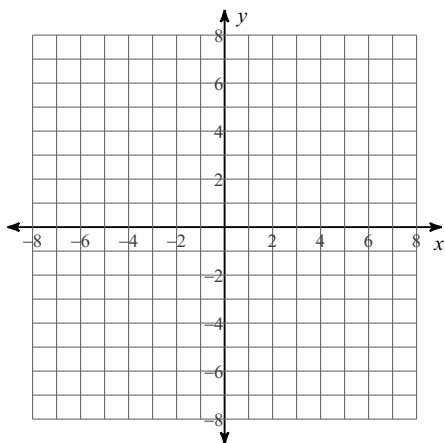
$$7) y = \frac{2}{3}(x - 4)$$



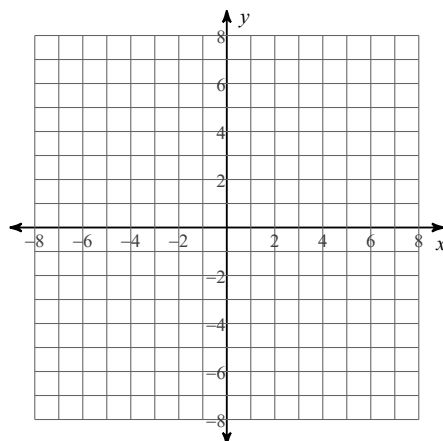
$$8) y - 5 = -\frac{5}{3}(x + 7)$$



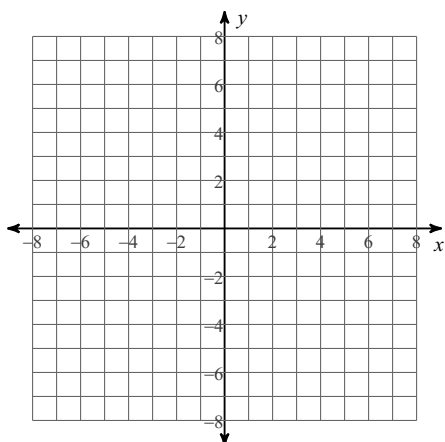
$$9) y + 2 = \frac{4}{3}x$$



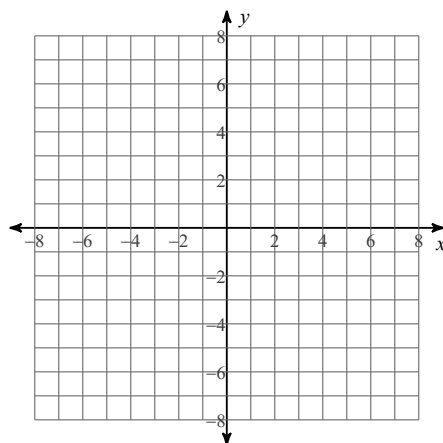
$$10) y - 2 = -3(x + 3)$$



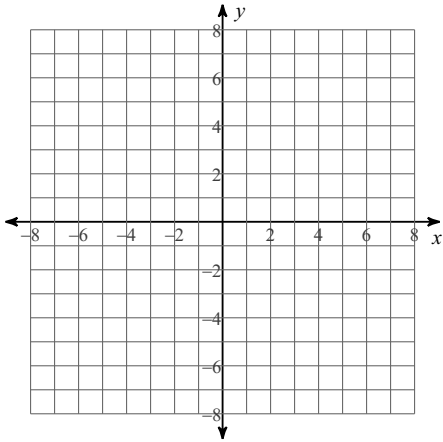
$$11) y - 5 = \frac{4}{3}(x + 1)$$



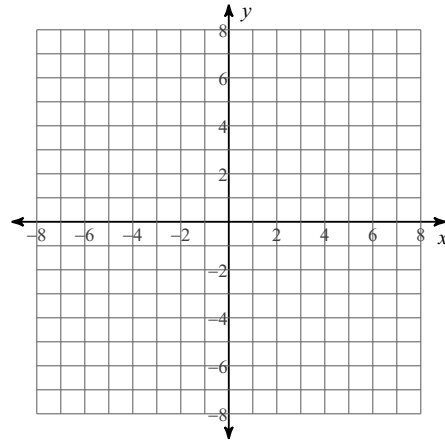
$$12) y - 2 = -9x$$



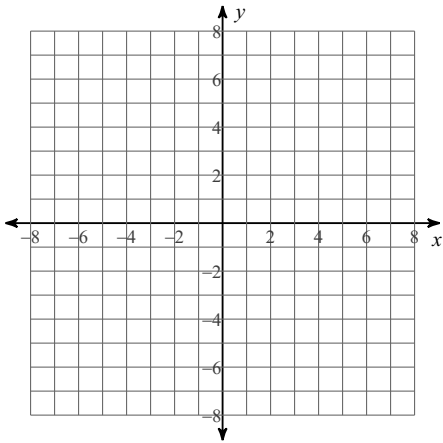
$$13) y + 7 = \frac{1}{3}(x + 1)$$



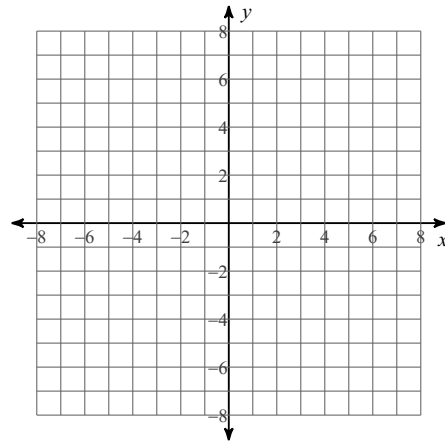
$$14) y + 2 = -\frac{5}{3}(x + 1)$$



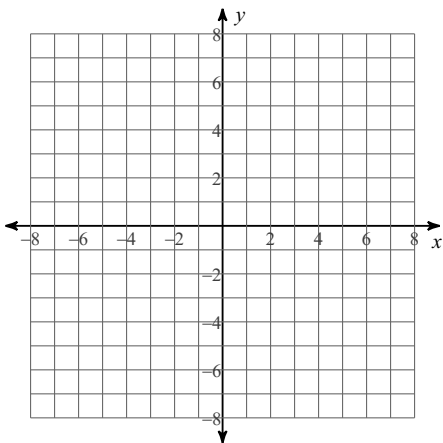
$$15) y - 2 = -\frac{7}{3}(x + 6)$$



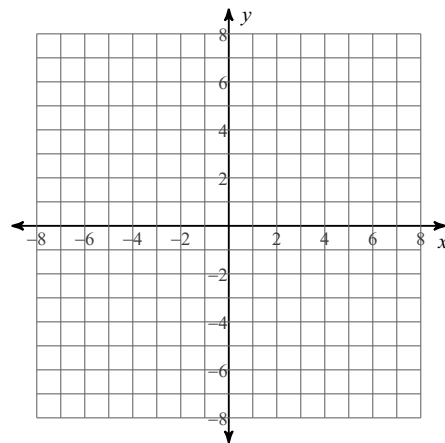
$$16) y - 5 = \frac{1}{5}(x + 4)$$



$$17) y - 1 = -4x$$



$$18) y - 5 = 0(x - 2)$$



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

19) through:  $(2, 5)$ , slope =  $\frac{5}{7}$

20) through:  $(4, -5)$ , slope =  $-2$

21) through:  $(5, 1)$ , slope =  $\frac{1}{5}$

22) through:  $(0, 4)$ , slope = undefined

23) through:  $(4, 4)$ , slope =  $1$

24) through:  $(-3, 5)$ , slope = undefined

25) through:  $(-3, -4)$ , slope =  $-\frac{1}{3}$

26) through:  $(1, 3)$ , slope =  $\frac{6}{5}$

27) through:  $(5, -3)$ , slope =  $-\frac{5}{9}$

28) through:  $(1, -2)$ , slope = undefined

29) through:  $(2, 5)$ , slope =  $2$

30) through:  $(1, 5)$ , slope =  $1$

31) through:  $(-4, 3)$ , slope =  $-\frac{1}{2}$

32) through:  $(-4, 4)$ , slope =  $-\frac{7}{4}$

33) through:  $(1, 3)$ , slope =  $4$

34) through:  $(-2, 5)$ , slope =  $-\frac{7}{2}$

35) through:  $(-2, 0)$ , slope =  $\frac{1}{2}$

36) through:  $(-3, -5)$ , slope =  $\frac{3}{2}$

37) through:  $(4, -1)$ , slope =  $\frac{3}{7}$

38) through:  $(-4, -3)$ , slope =  $-\frac{1}{2}$

**Write the point-slope form of the equation of the line through the given points.**

39) through:  $(0, -3)$  and  $(4, 4)$

40) through:  $(-5, 1)$  and  $(0, -3)$

41) through:  $(0, -4)$  and  $(1, -3)$

42) through:  $(-2, 2)$  and  $(-5, 3)$

43) through:  $(0, -5)$  and  $(-5, 1)$

44) through:  $(-1, 3)$  and  $(4, -1)$

45) through:  $(3, -5)$  and  $(3, 0)$

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

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

48) through:  $(-5, -1)$  and  $(0, -1)$