

Complete the following IN CLASS. It is due at the end of the hour.

## Practice 3-5

Lines in the Coordinate Plane

Write an equation of the line with given slope that contains the point in slope intercept form.

1.  $F(3, -6)$ , slope  $\frac{1}{3}$       2.  $Q(5, 2)$ , slope  $-2$       3.  $A(3, 3)$ , slope  $7$       4.  $B(-4, -1)$ , slope  $-\frac{1}{2}$

Rewrite each equation in slope intercept form.

9.  $2y = 8x - 2$       10.  $2y = \frac{1}{2}x - 10$       11.  $3x + 9y = 18$       12.  $-x + y = -1$

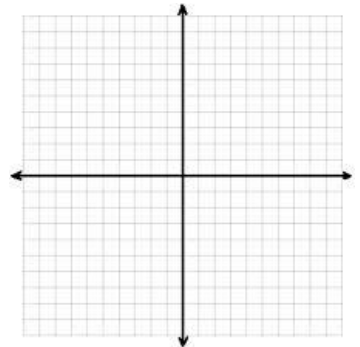
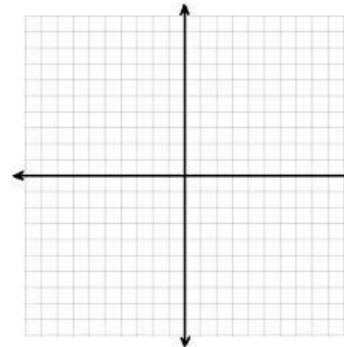
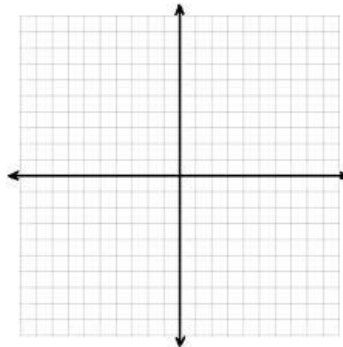
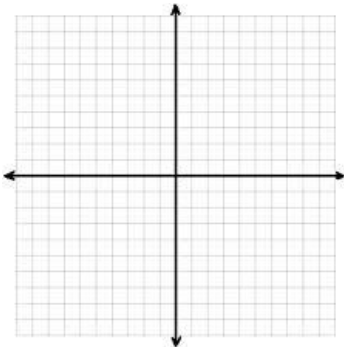
Graph each line. State the slope and y-intercept, if possible.

17.  $y = 5x + 4$

18.  $y = \frac{1}{2}x - 3$

19.  $x = -2$

20.  $y = -2x$



Slope = \_\_\_\_\_  
y-intercept: \_\_\_\_\_

Slope = \_\_\_\_\_  
y-intercept: \_\_\_\_\_

Slope = \_\_\_\_\_  
y-intercept: \_\_\_\_\_

Slope = \_\_\_\_\_  
y-intercept: \_\_\_\_\_

Write an equation of the line containing the given points in slope intercept form and point slope form.

25.  $A(2, 7), B(3, 4)$

26.  $P(-1, 3), Q(0, 4)$

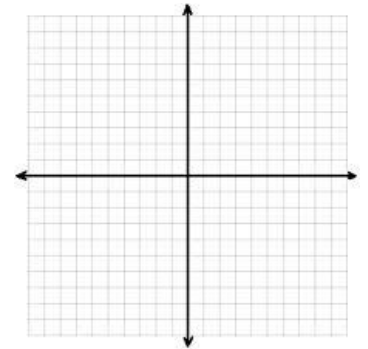
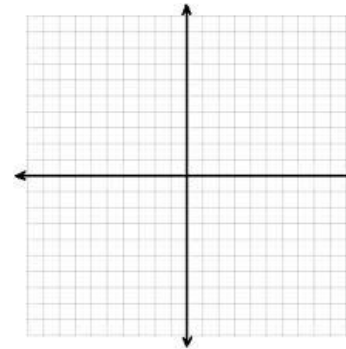
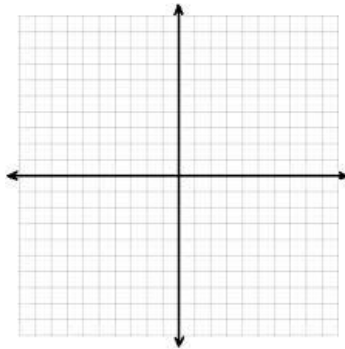
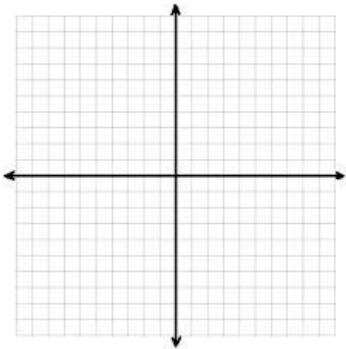
Write the equations for (a) the horizontal line and (b) the vertical line that contains the given point. State the slope of each line and sketch its graph.

33.  $Z(2, -11)$

34.  $D(0, 2)$

35.  $R(-4, -4)$

36.  $F(-1, 8)$



Graph each line using intercepts.

37.  $3x - y = 12$

38.  $2x + 4y = -4$

39.  $\frac{1}{2}x + \frac{1}{2}y = 3$

40.  $12x - 3y = -6$

