Unit 4.3 Slope Intercept Form and Point Slope Form

1. Identify the slope and intercept for the given linear equation

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

   b. $2y = 4x + 8$

   c. $3x + 6y = 9$

2. Find the *slope* of the line through the ordered pairs

   a. (5,1) and (-3,0)

   b. $(\frac{7}{2}, \frac{3}{4})$ *and* $(\frac{1}{2}, -3)$

3. Find the *slope* and *intercept* through the ordered pairs

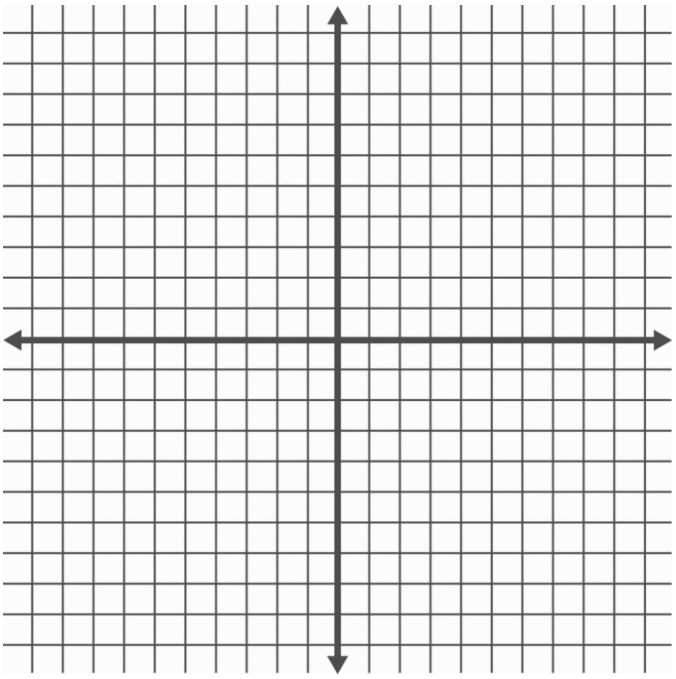
   a. (2,4) and (-1,3)

b. (4,100) and (20,420)

4. Write each equation in slope – intercept form. Then graph the line.

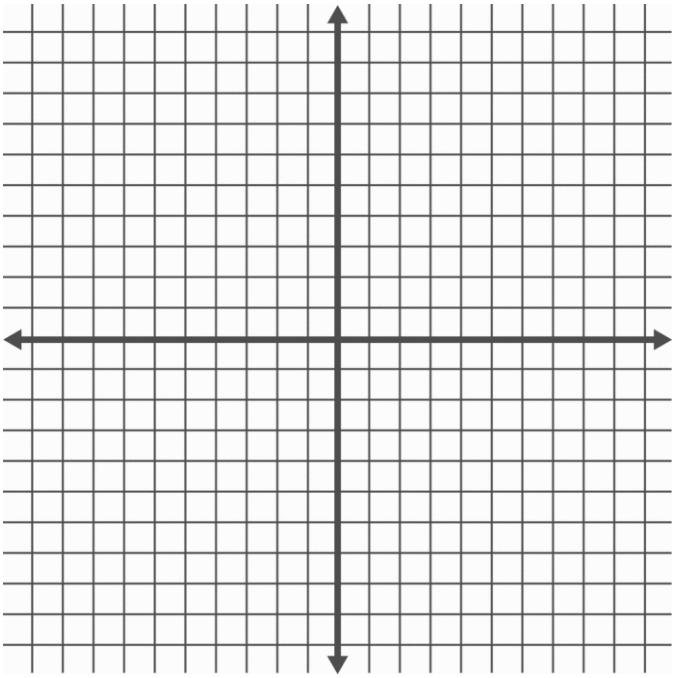
a. $x + 5y = 10$

equation: _____



b. $5x - 2y + 5 = 0$

equation: _____



5. Find the slope - intercept equation for the lines given as an ordered pair and slope

   a. (0,9) where m = -1

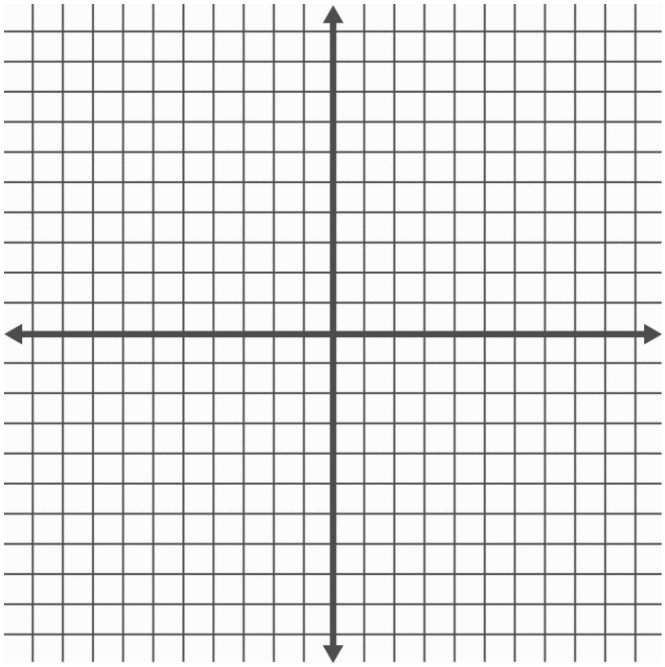
      Equation: _____

   b. (2,-3) where $m = -\frac{5}{6}$

      Equation: _____

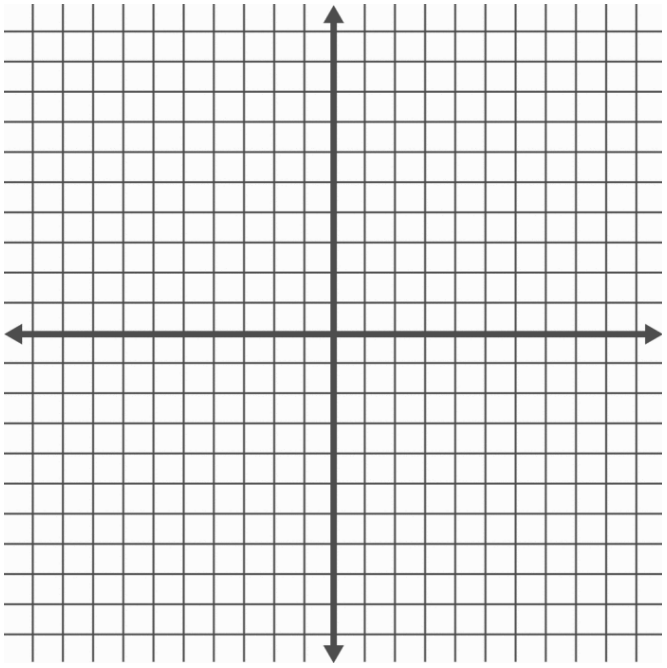
6. Find the slope and a point on the line. Then graph the line

$y + 6 = \frac{1}{3}(x - 7)$

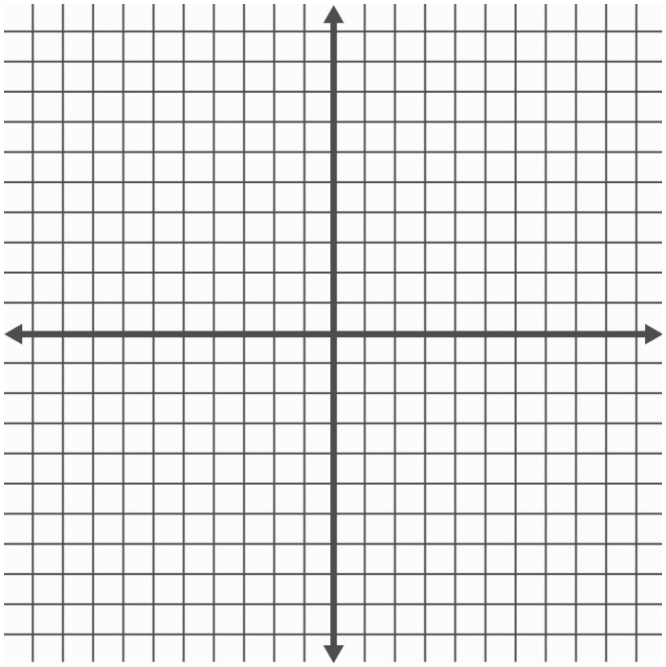


7. Write the following in point slope form and then graph the line

$(\frac{5}{2}, 0)$ *and* $(2, -\frac{1}{3})$



8. Determine the equation for the line that is parallel to $7x - 3y = 1$ that goes through (-1,1). Graph both lines



9. Determine the equation for the line that is perpendicular to $2x + y = 5$ that goes through (6,-1). Graph both lines