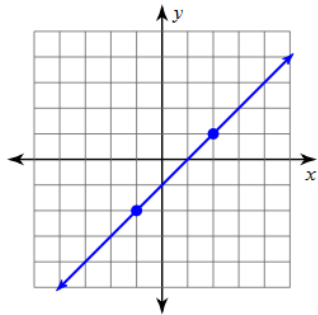


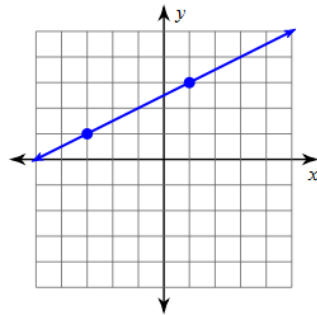
Finding Slope

For problems 1 and 2 create a line parallel to given one. For problems 3 and 4 create a line perpendicular to the given one. Explain by identifying the slope of the original line and your line.

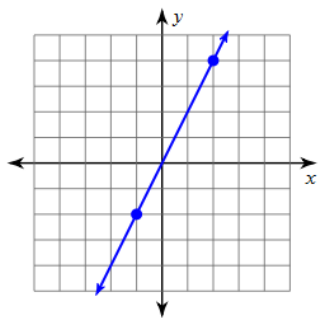
1)



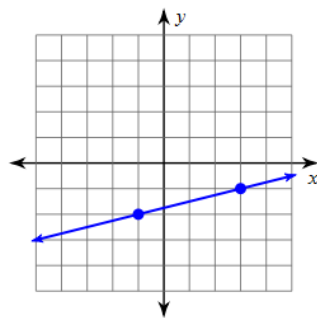
2)



3)



4)



Write an equation of a line perpendicular to each given line.

5) $y = \frac{7}{5}x + 2$

6) $y = -\frac{2}{5}x + 4$

Write an equation of a line parallel to each given line.

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

8) $y = -\frac{5}{3}x + 2$

Write an equation for a line that is parallel for 9 and 10 and perpendicular for 11 and 12 to the line created from the given points.

9) $(-8, -2), (-7, 5)$

10) $(-4, -10), (-1, -1)$

11) $(-3, -13), (-11, -19)$

12) $(-20, 1), (-19, -8)$

Parallel and Perpendicular

Write an equation for a line parallel to the given line.

1) $y = 3x + 5$

2) $y = \frac{2}{3}x + 5$

3) $x + y = 2$, through point $(2, 1)$

4) $x - 2y = -6$, through point $(6, -5)$

Write an equation for a line perpendicular to the given line.

5) $y = 2x + 1$, through point $(4, 6)$

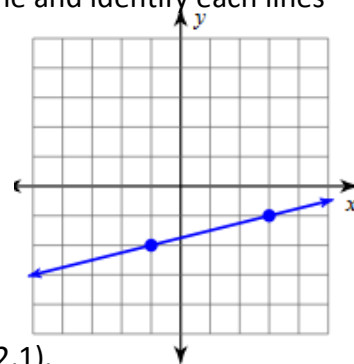
6) $y = \frac{2}{5}x - 5$, through point $(-2, 2)$

7) $3x + y = 0$

8) $3x - y = -1$

9) Write an equation for a line parallel to a line with the points.
 $(-14, -16), (2, -20)$

10. Draw a line perpendicular to the given line and identify each lines slope.



11. Write the equation for a line parallel to line $y - 4x = 7$ that goes through point $(2, 1)$.

12. Write the equation for a line that is perpendicular to the line $3y + 6x + 7 = -2$ and goes through point $(10, 6)$.