Geometry With Coordinates
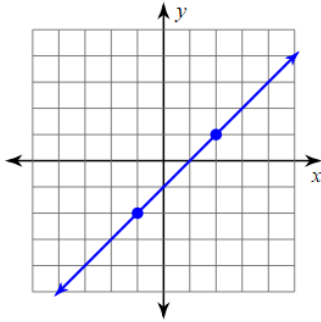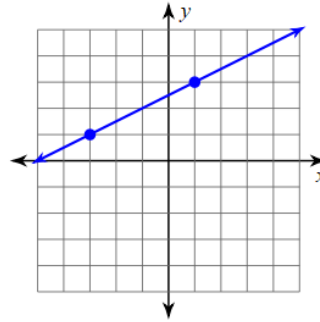
Name_____

Practice Set 1

Date_____ Block_____

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.
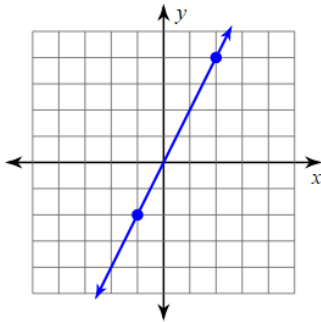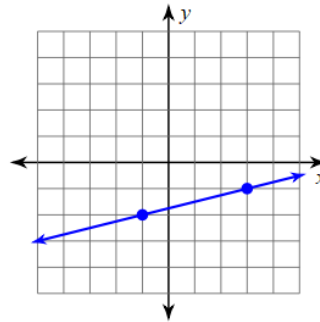
1)

2)

3)

4)

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

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

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

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

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

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

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

Geometry in Coordinate Plane

Name_____

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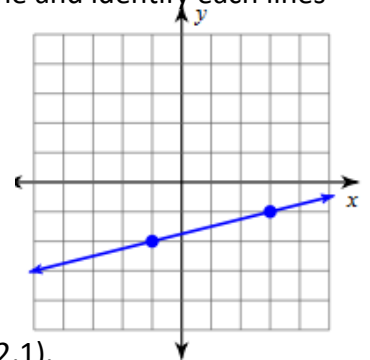
5) $y = 2x + 1$, through point (4,6)

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).