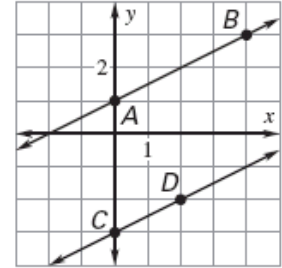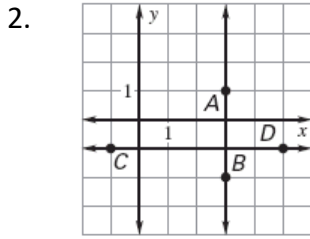**1. Are the lines parallel? You must have work that supports your answer.**
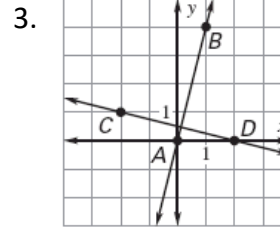
Parallel?: _____

Are the lines perpendicular? You must have work that supports your answer.

2.

Perpendicular? _____

3.

Perpendicular? _____

Tell whether the lines through the given points are *parallel*, *perpendicular*, or *neither*. You must have work that supports your answer.

4. Line 1: (1, 1), (3, 3)
    Line 2: (2, 2), (0, 4)

5. Line 1: (−2, 3), (−5, 2)
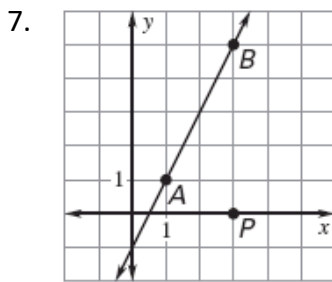   Line 2: (4, 1), (5, 3)

6. Line 1: (−3, 4), (1, 2)
    Line 2: (6, 2), (8, 1)
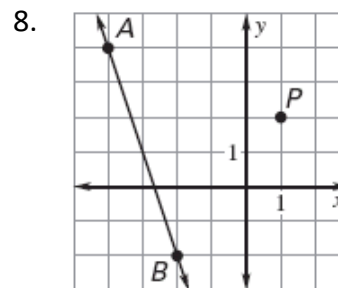
These lines are _____

These lines are _____

These lines are _____

Graph the line <u>parallel</u> to line *AB* that passes through point *P*. Identify your line's slope and y-intercept.
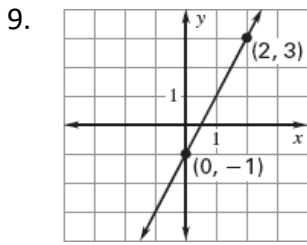
7.

Graph the line <u>perpendicular</u> to line *AB* that passes through point *P*. Identify your line's slope and y-intercept.
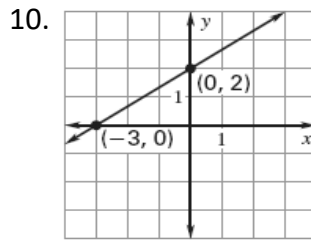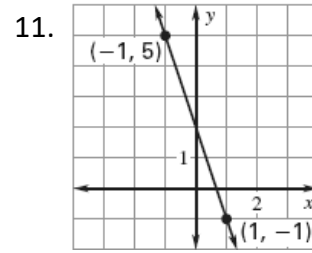
8.

m = _____   *y*-int: _____

m = _____   *y*-int: _____

Write an equation (in Slope-Intercept Form) of the line shown.

9.

(2, 3)
1
1   x
(0, −1)

Equation:_____

10.

(0, 2)
−1
(−3, 0)   1 x

Equation:_____

11.

(−1, 5)
1
2   x
(1, −1)

Equation:_____

12. Write an equation of the line that passes through the point P (3,0) and is parallel to y = 6.

Equation:_____

13. Write an equation (in S-I form) of the line that passes through point P (1,3) and is parallel to y = 2x - 2.

Equation:_____

14. Write an equation (in S-I form) of the line that passes through point P (3, -2) and is perpendicular to $y = -\frac{1}{3}x - 3$
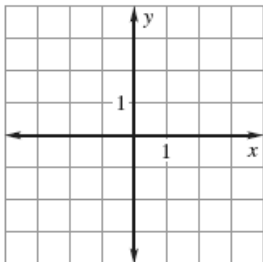
Equation:_____

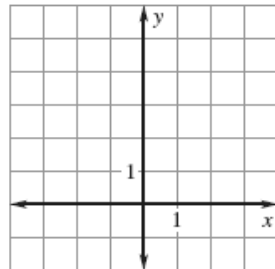15. Write an equation of the line that passes through point P(-2, 5) and is perpendicular to x = 5.

Equation:_____

Graph the equation. Depending on your method of graphing, identify either: (1) the slope and y-int., or (2) your x- and y-intercept

16.) $3x + y = 2$

17.) $4x + 2y = 8$

18.) $2y + 1 = 3x + 5$