

## SECTION 3.5: SLOPES OF PARALLEL & PERPENDICULAR LINES

Homework: \_\_\_\_\_

### Learning Target:

- 3d. Understanding of how to determine if lines are parallel or perpendicular on a coordinate plane
- 3e. Understanding of how to write parallel and perpendicular linear equations.

### Vocabulary:

Parallel Slopes  
Point-Slope Form

Perpendicular Slopes  
Slope

*Find the slope, parallel slope, and perpendicular slope for each line.*

1. A(-2, 3) B(4, -5)

2. C(4, -3) D(4, 1)

3. E(-7, 2) F(1, 6)

*Write an equation for a line that satisfies each statement.*

4. (-2, 5)  $m = \frac{1}{2}$

5. (3, -8)  $m = \frac{2}{3}$

6. (-4, 9) parallel to  $m = \frac{3}{4}$

7. (3, 4) perpendicular to  $m = -3$