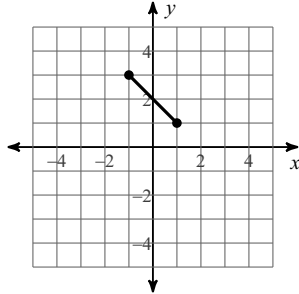


## Unit 5 SG 1

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.**

1)

2)  $(-5, 5), (-1, -5)$ 

**Write the slope-intercept form of the equation of the line described.**

3) through:  $(5, -2)$ , parallel to  $y = -\frac{4}{5}x + 4$ 4) through:  $(5, 2)$ , perp. to  $y = -\frac{5}{2}x + 5$ 

**Find the slope of a line parallel to each given line.**

5)  $y = \frac{3}{2}x - 1$ 6)  $x + 4y = 0$ 

**Find the slope of a line perpendicular to each given line.**

7)  $y = \frac{1}{2}x + 1$ 8)  $x + 2y = -6$ 

9) Partitioning: Given the points  $A(5, -1)$  and  $B(-5, 3)$ , find the coordinates of the point  $P$  on directed line segment  $AB$  that partitions  $AB$  in the ratio of 1:3.

**Find the midpoint of the line segment with the given endpoints.**

10)  $(3, -6), (3, 0)$ 

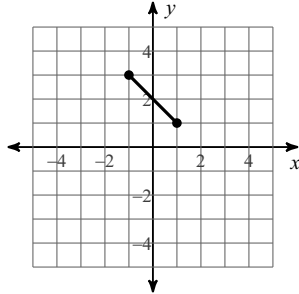
**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

11) Endpoint:  $(4, -1)$ , midpoint:  $(-6, -1)$

Unit 5 SG 1

**Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.**

1)



2.8

2)  $(-5, 5), (-1, -5)$

10.8

**Write the slope-intercept form of the equation of the line described.**

3) through:  $(5, -2)$ , parallel to  $y = -\frac{4}{5}x + 4$

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

4) through:  $(5, 2)$ , perp. to  $y = -\frac{5}{2}x + 5$

$$y = \frac{2}{5}x$$

**Find the slope of a line parallel to each given line.**

5)  $y = \frac{3}{2}x - 1$

$\frac{3}{2}$

6)  $x + 4y = 0$

$-\frac{1}{4}$

**Find the slope of a line perpendicular to each given line.**

7)  $y = \frac{1}{2}x + 1$

-2

8)  $x + 2y = -6$

2

9) Partitioning: Given the points  $A(5, -1)$  and  $B(-5, 3)$ , find the coordinates of the point P on directed line segment AB that partitions AB in the ratio of 1:3.

2.5, 0

**Find the midpoint of the line segment with the given endpoints.**

10)  $(3, -6), (3, 0)$

$(3, -3)$

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

11) Endpoint:  $(4, -1)$ , midpoint:  $(-6, -1)$

$(-16, -1)$