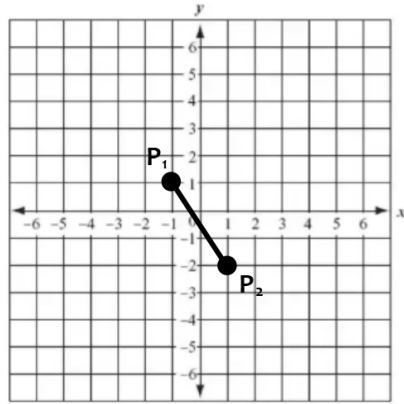


Unit 1 Review **Guided Practice** (Day 6)

1. Find the distance  $d(P_1, P_2)$  between the given points  $P_1$  and  $P_2$ .



$d(P_1, P_2) = \underline{\hspace{2cm}}$

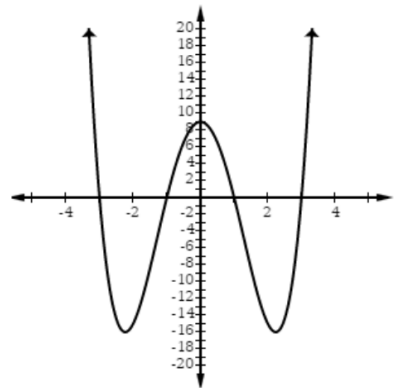
(Simplify your answer. Write an exact answer, using radicals as needed.)

2. Find the midpoint of the line segment joining the points  $P_1$  and  $P_2$ .

$P_1 = (-3, 2); P_2 = (7, -8)$

The midpoint of the line segment joining the points  $P_1$  and  $P_2$  is  $\underline{\hspace{2cm}}$ .  
(Simplify your answer. Write an ordered pair.)

3. The graph of an equation is given.  
(a) Find the intercepts.  
(b) Indicate whether the graph is symmetric with respect to the x-axis, the y-axis, or the origin.

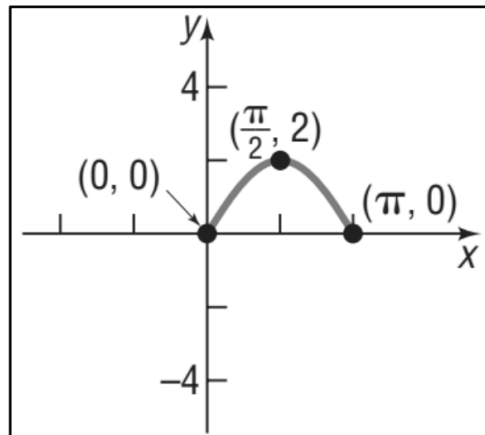


(a) The intercept(s) of the graph are

$\underline{\hspace{4cm}}$ .  
(Write an ordered pair. Use a comma to separate answers as needed. Write each answer only once.)

(b)  $\underline{\hspace{4cm}}$

4. Draw a complete graph so that it has symmetry with respect to the origin.



5. The slope  $m$  and a point  $P$  on a line are given. Use the information to find three additional points on the line.

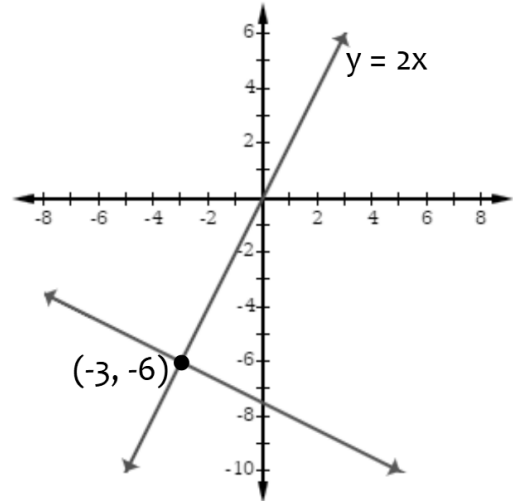
$$m = \frac{2}{5}; P = (-6, -5)$$

- A.  $(-4,0), (-2,5), (0,10)$   
 B.  $(-1, -3), (4, -1), (9,1)$   
 C.  $(0, -4), (5, -2), (10,0)$   
 D.  $(-3, -1), (-1,4), (1,9)$

6. Find an equation of the line  $L$ .  $L$  is perpendicular to  $y = 2x$ .

The equation is \_\_\_\_\_.

(Write an equation. Use integers or fractions for any numbers in the equation. Simplify your answer.)



7. Find an equation for the line with the given properties. Express your answer using either the general form or the slope-intercept form of the equation of a line.

Containing the points  $(-2, 4)$  and  $(7, 1)$

The equation is \_\_\_\_\_.

(Write an equation. Use integers or fractions for any numbers in the equation. Simplify your answer.)

8. Determine the equation of the graph to the right.

The equation is

\_\_\_\_\_.

(Simplify your answer. Type your answer in standard form.)

