

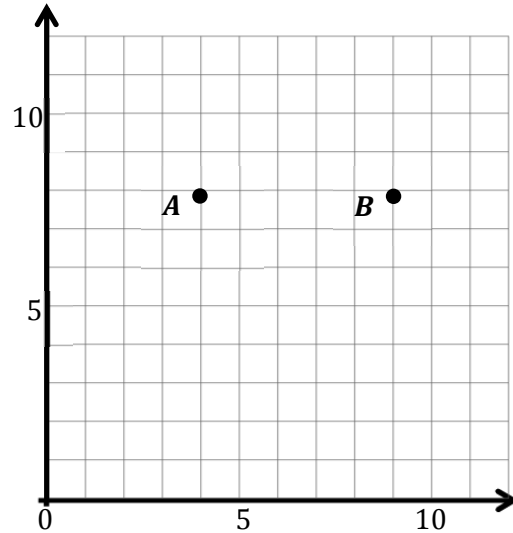
Name _____

Date _____

1. Use the coordinate plane to answer the questions.
 - a. Use a straightedge to construct a line that goes through points *A* and *B*. Label the line *g*.
 - b. Line *g* is parallel to the _____-axis and is perpendicular to the _____-axis.
 - c. Draw two more points on line *g*. Name them *C* and *D*.
 - d. Give the coordinates of each point below.

A: _____ B: _____
 C: _____ D: _____

- e. What do all of the points on line *g* have in common?



- f. Give the coordinates of another point that falls on line *g* with an *x*-coordinate greater than 25.

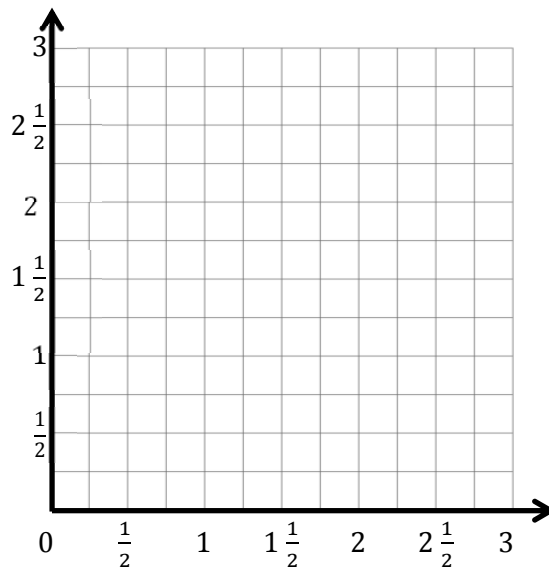
2. Plot the following points on the coordinate plane to the right.

H: $(\frac{3}{4}, 3)$ I: $(\frac{3}{4}, 2\frac{1}{4})$
 J: $(\frac{3}{4}, \frac{1}{2})$ K: $(\frac{3}{4}, 1\frac{3}{4})$

- a. Use a straightedge to draw a line to connect these points. Label the line *f*.
- b. In line *f*, $x = \underline{\hspace{2cm}}$ for all values of *y*.
- c. Circle the correct word:

Line *f* is *parallel* *perpendicular* to the *x*-axis.

Line *f* is *parallel* *perpendicular* to the *y*-axis.



- d. What pattern occurs in the coordinate pairs that make line *f* vertical?

3. For each pair of points below, think about the line that joins them. For which pairs is the line parallel to the x -axis? Circle your answer(s). Without plotting them, explain how you know.

- a. $(3.2, 7)$ and $(5, 7)$ b. $(8, 8.4)$ and $(8, 8.8)$ c. $(6\frac{1}{2}, 12)$ and $(6.2, 11)$

4. For each pair of points below, think about the line that joins them. For which pairs is the line parallel to the y -axis? Circle your answer(s). Then, give 2 other coordinate pairs that would also fall on this line.

- a. $(3.2, 8.5)$ and $(3.22, 24)$ b. $(13\frac{1}{3}, 4\frac{2}{3})$ and $(13\frac{1}{3}, 7)$ c. $(2.9, 5.4)$ and $(7.2, 5.4)$

5. Write the coordinate pairs of 3 points that can be connected to construct a line that is $5\frac{1}{2}$ units to the right of and parallel to the y -axis.

- a. _____ b. _____ c. _____

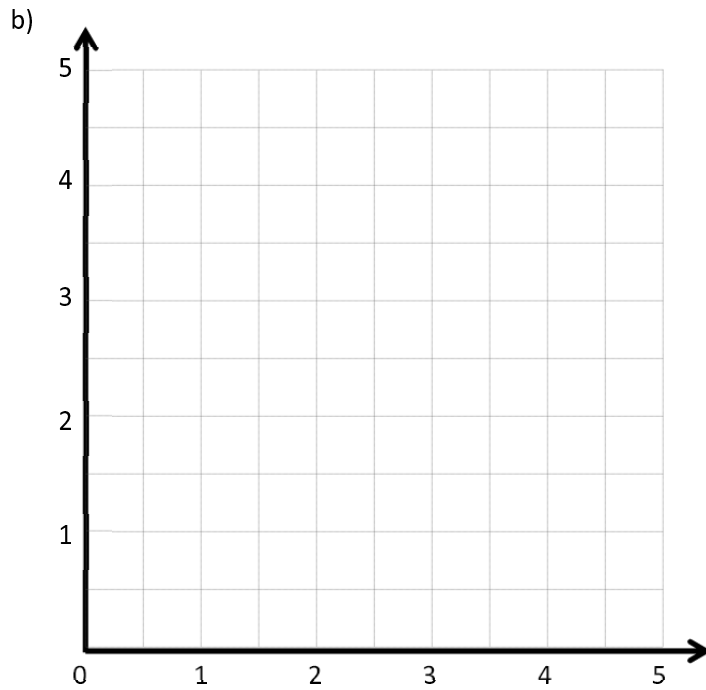
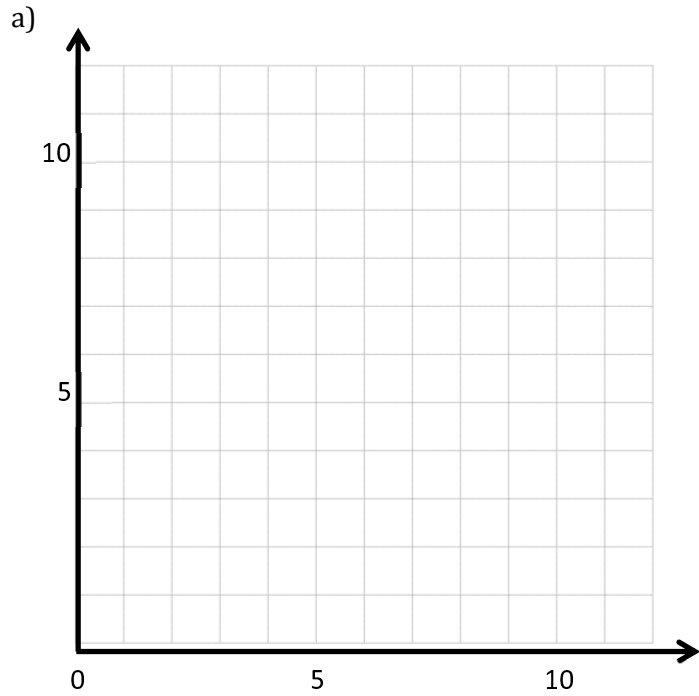
6. Write the coordinate pairs of 3 points that lie on the y -axis.

- a. _____ b. _____ c. _____

7. Leslie and Peggy are playing *Battleship* on axes labeled in halves. Presented in the table is a record of Peggy's guesses so far. What should she guess next? How do you know? Explain using words and pictures.

$(5, 5)$	miss
$(4, 5)$	hit
$(3\frac{1}{2}, 5)$	miss
$(4\frac{1}{2}, 5)$	miss

Point	x	y	(x, y)
<i>H</i>			
<i>I</i>			
<i>J</i>			
<i>K</i>			
<i>L</i>			



Point	x	y	(x, y)
<i>D</i>	$2\frac{1}{2}$	0	$(2\frac{1}{2}, 0)$
<i>E</i>	$2\frac{1}{2}$	2	$(2\frac{1}{2}, 2)$
<i>F</i>	$2\frac{1}{2}$	4	$(2\frac{1}{2}, 4)$