Unit: Coordinate Plane
Student Handout 6

Name _____

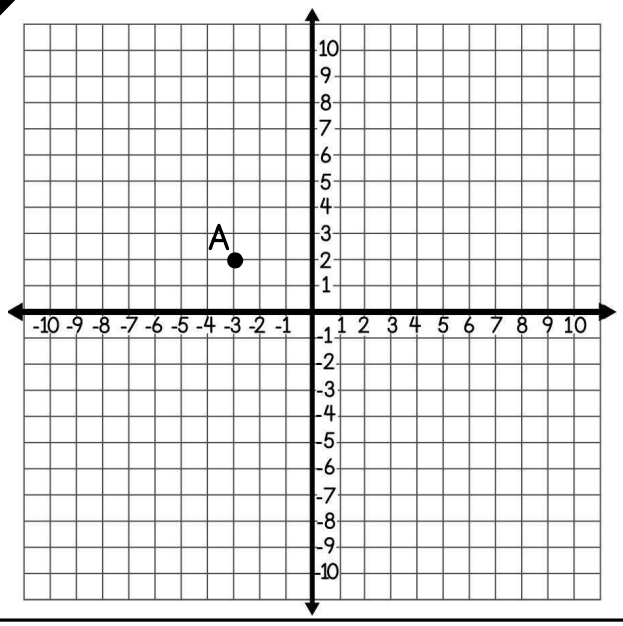
Date _____ Pd_____

CREATING FIGURES ON THE COORDINATE PLANE

FIGURES ON THE COORDINATE PLANE

- Geometric figures can be formed using _____ and _____.
  - line segment: _____
  - end points: _____

1 Use the graph below to answer a-c.



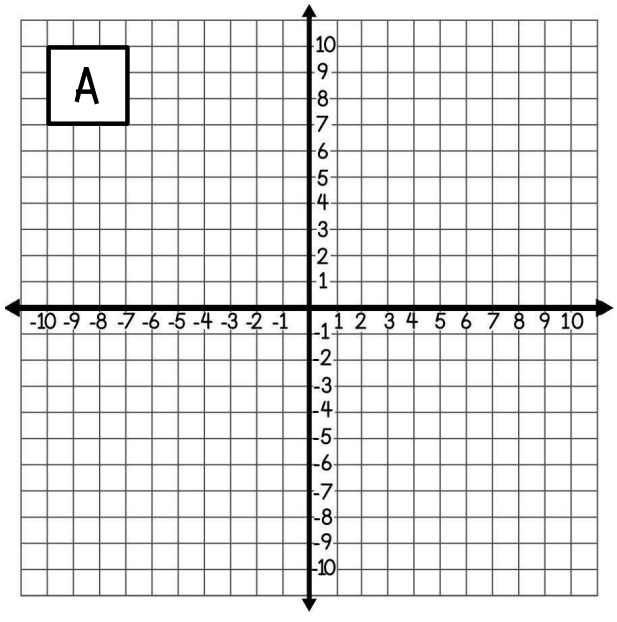
a. Draw a line segment that extends 6 units from point A.

b. Is it possible there is another line segment that also extends 6 units from point A? Why or why not?

c. Determine all four points that could be possible endpoints.

_____, _____, _____, _____

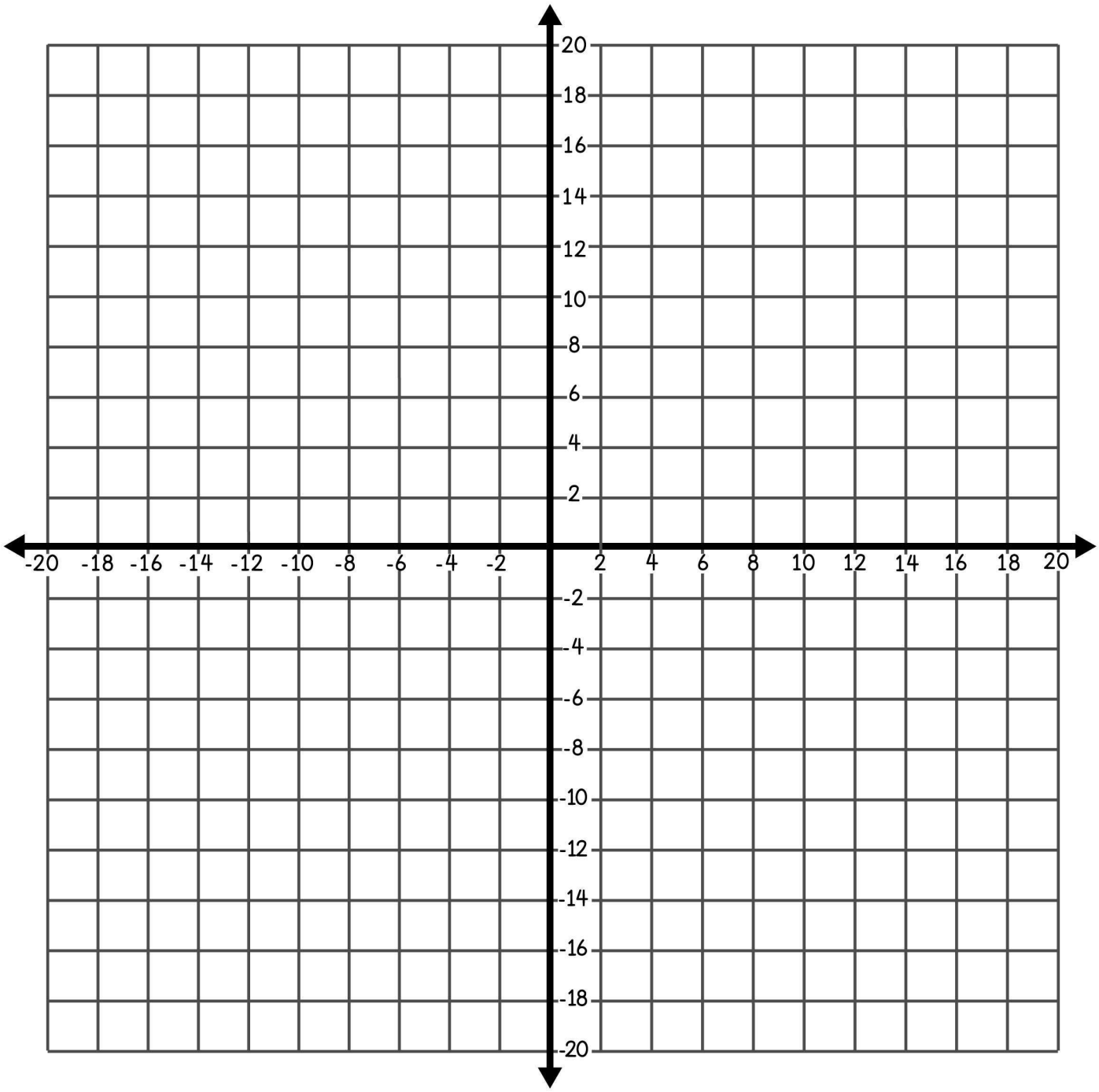
2 Complete the table and sketch the figures on the coordinate plane below.



	SIDE LENGTH	PERIMETER	AREA
A	3x3		
B		18 units	
C			30 units^2
D	2x5		
E		16 units	

3. Use any rectangular or triangular shape to create a picture of your choice. Your picture must meet at least three of the following criteria.

A total area of 250 units^2 or more.	A shape reflected across the x-axis.	Two points that are 12 units away from each other in a vertical direction.	At least one point in each of the four quadrants.



Summarize today's lesson:

Unit: Coordinate Plane
Homework 6

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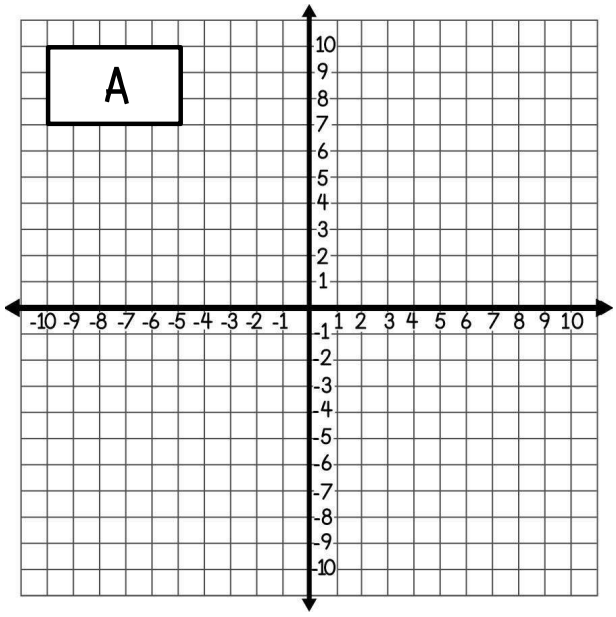
CREATING FIGURES ON THE COORDINATE PLANE

Use your understanding of the coordinate plane to answer the questions below.

1. Complete the table and sketch the figures on the coordinate plane below.

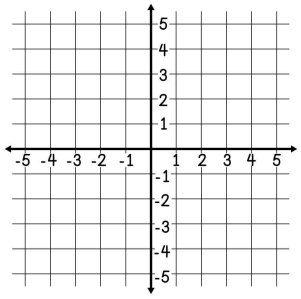


	SIDE LENGTH	PERIMETER	AREA
A	5x3		
B		26 units	
C			20 units^2
D	6x2		
E		18 units	

2. The coordinates of one endpoint of a line segment are (-3, -5). The line segment is 11 units long. What are the other possible endpoints?

3. Two of the vertices of a rectangle are (6, 1) and (7, 1). If the rectangle has a perimeter of 18 units, then what are the coordinates of its other two vertices?

4. A square has a perimeter of 28 units, an area of 49 units^2, and sides that are either horizontal or vertical. Two of the vertices are in quadrants where the x-value is negative. What are the possible coordinates of the square?



5. Point D is located at (-4, 4), point E is located at (4, 4), point F is located at (4, 2), and point G is located at (-4, 2). What is the perimeter of the object? What is the area of the object?

Perimeter: _____

Area: _____