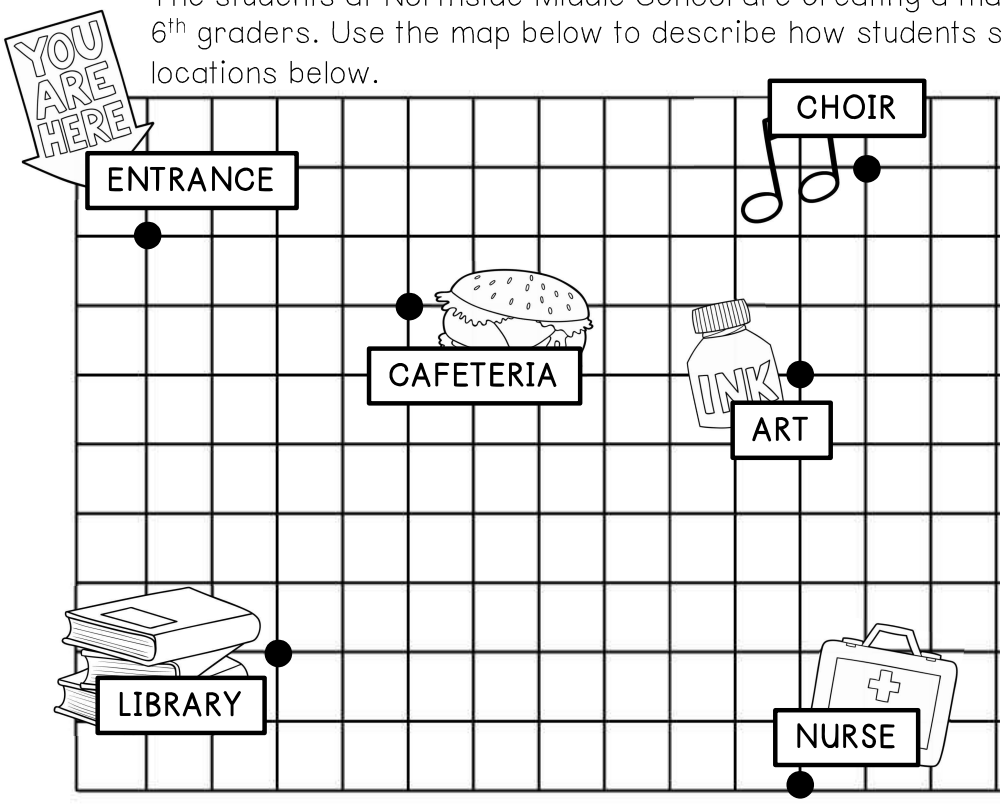
Unit: Coordinate Plane
Student Handout 1

Name _____

Date _____Pd_____

GRAPHING IN QUADRANT ONE

The students at Northside Middle School are creating a map around the school for incoming 6th graders. Use the map below to describe how students should travel between the locations below.



a. From the art room to the nurse

b. From the school entrance to the library

c. If a student leaves the cafeteria and travels two units up and seven units to the right, where will the student be?

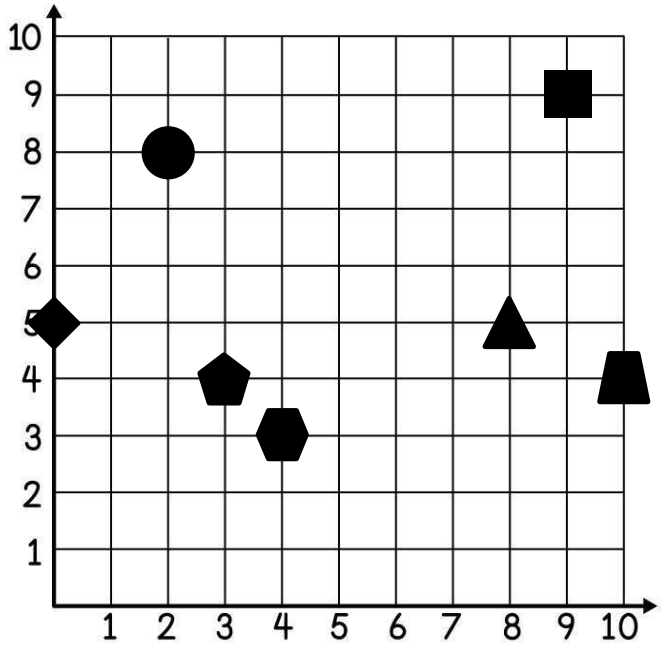
ORDERED PAIRS

- An ordered pair describes an exact _____ on the coordinate plane.
  - **x-coordinate:** the _____ number in an ordered pair and indicates movement parallel to the _____, or horizontally.
  - **y-coordinate:** the _____ number in an ordered pair and indicates movement parallel to the _____, or vertically.
- When graphing ordered pairs, always begin at the origin, _____.

Describe the process that you would take to graph the ordered pairs below.

1. The ordered pair (8, 4) means that to plot the point, you will begin at _____ and then move _____ and _____.	2. You begin at the origin and travel 5 units to the right and then up 3 units. You will be at what ordered pair?

3. Use the coordinate plane on the left to list the ordered pair of each shape in the table.



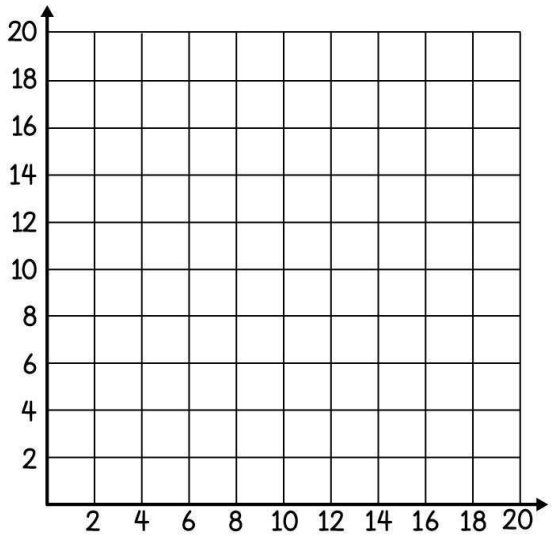
	ORDERED PAIR
CIRCLE	
TRIANGLE	
SQUARE	
HEXAGON	
PENTAGON	
TRAPEZOID	
RHOMBUS	

a. Describe the difference between the ordered pairs for the hexagon and the pentagon.

b. Yvette is asked to plot the point (7, 0) and places it on the y-axis. Did Yvette plot the point correctly? Justify your thinking.

4. Use the table on the left to graph each ordered pair on the coordinate plane.

	ORDERED PAIR
CIRCLE	(4, 18)
TRIANGLE	(5, 8)
SQUARE	(7, 0)
HEART	(18, 12)
STAR	(13, 7)
TRAPEZOID	(10, 16)
RHOMBUS	(8, 5)



Summarize today's lesson:

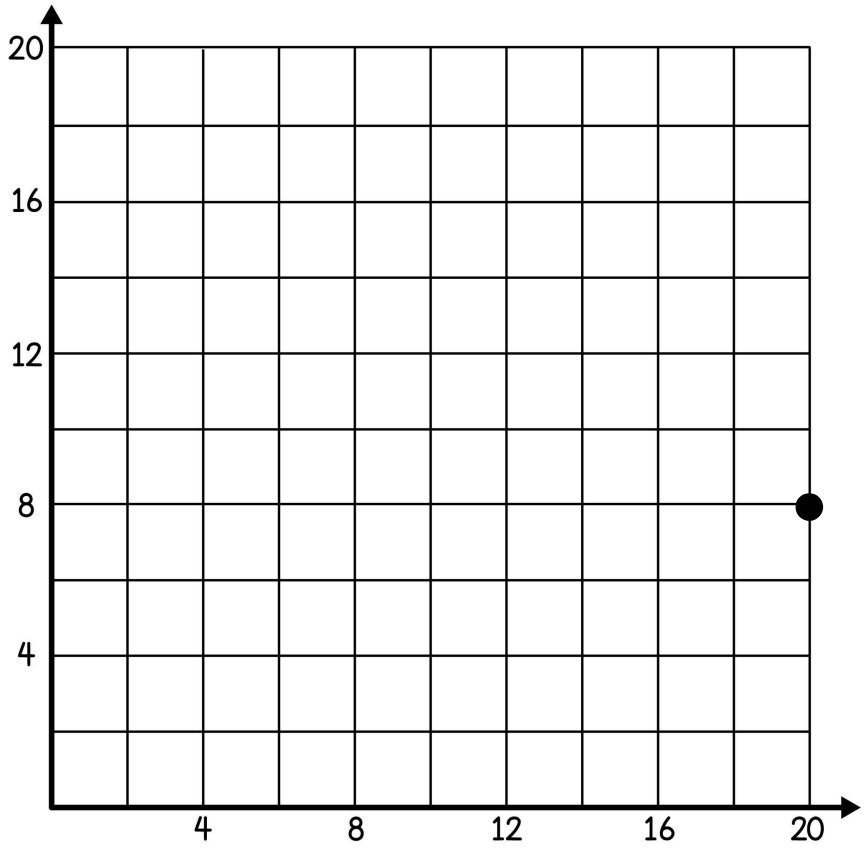
Unit: Coordinate Plane
Homework 1

Name _____

Date _____Pd_____

GRAPHING IN QUADRANT ONE

Mr. Avery forms a picture in the first quadrant of the coordinate plane. Help him determine where the points should go based on the requirements. Start with the point given on the graph and connect the lines as you go in order. Draw a line to connect your last point back to the original point on the graph. Some points already have a location, so list a possible requirement that would result in that location.



POINT	REQUIREMENTS	LOCATION
1	The x-coordinate is in the middle of the x-axis; the y-coordinate is on the x-axis	
2		(0, 8)
3	The x-coordinate is neither a positive nor negative number; the y-coordinate is half of 28	
4		(4, 16)
5	The x-coordinate is the sum of the x- and y-coordinate for point 1; the y-coordinate is 4 more than the x-coordinate	
6		(16, 16)
7	The x-coordinate is twice the value of the x-coordinate for point 5; the y-coordinate is the y-coordinate from point 3	