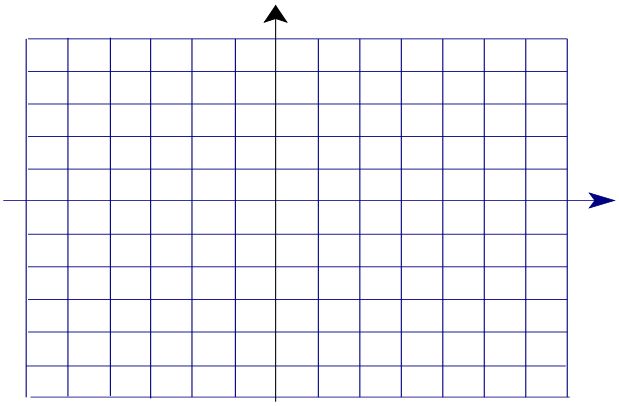
Math 041 Assignment 1.1 **Last Name:_____1st_____**

Instructions: Write complete legible solutions to the following problems in the space provided. Be sure to supply all the necessary steps that lead to your answers.

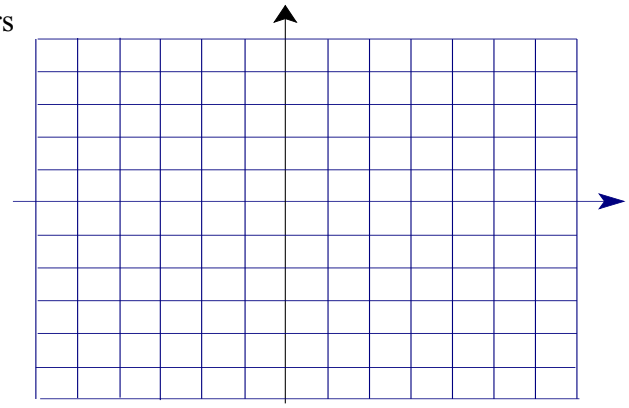
1. Plot the set of ordered pairs and name the quadrant for each pair. Be sure to label the axes and determine the increment on each axis

Ordered Pair	Quadrant
$P_1(2,3)$	
$P_2(-4,3)$	
$P_3(2,-3)$	
$P_4(4,-1)$	
$P_5(2,0)$	



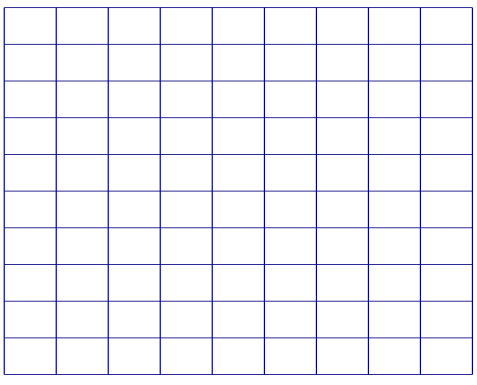
2. Repeat exercise 1 for the set of ordered pairs

Ordered Pair	Quadrant
$P_1(10,200)$	
$P_2(-40,300)$	
$P_3(20,-300)$	
$P_4(40,-100)$	
$P_5(0,400)$	



3. Plot the vertices of the triangle ABC then find its perimeter and the area.

$A(-2,0),\ B(2,4),\ C(-3,5)$

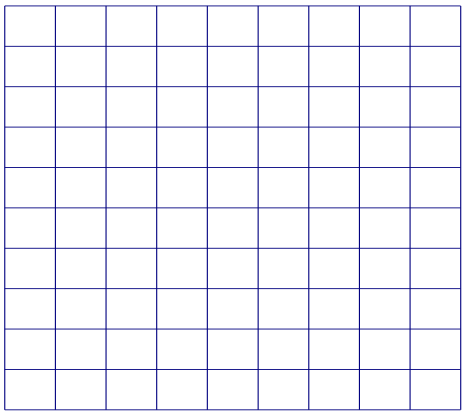


Area
Ans_____

Perimeter
Ans_____

4. Consider the three points $A(-5,-2), B(1,4),$ and $C(-5,4)$ where these points form three vertices of a triangle.

a. Draw the largest possible triangle on the given grid.



b. Prove the triangle ABC is a right angle triangle.

c. Find the midpoint between *A* and *B*.

d. Find the equation of the circle that passes through the points *A*, *B* and *C*

5. If $P_1(-4, 2)$ and $P_2(2,2)$ are the endpoints of the diameter of a circle, find the equation of the circle. You may want to draw the circle to support your argument.