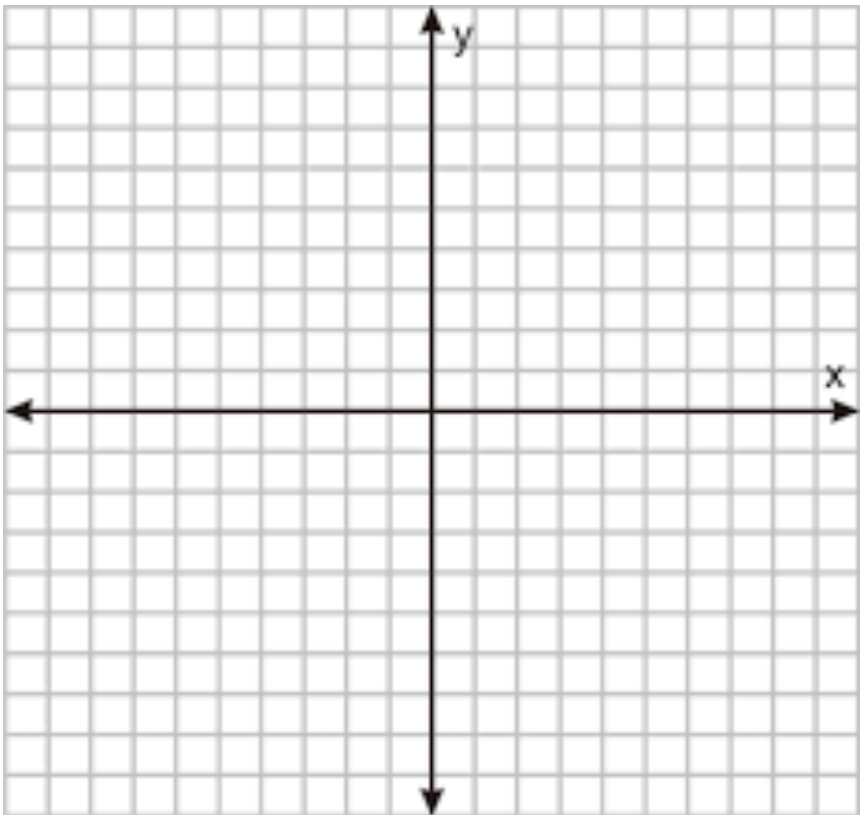
Polygons on the coordinate plane

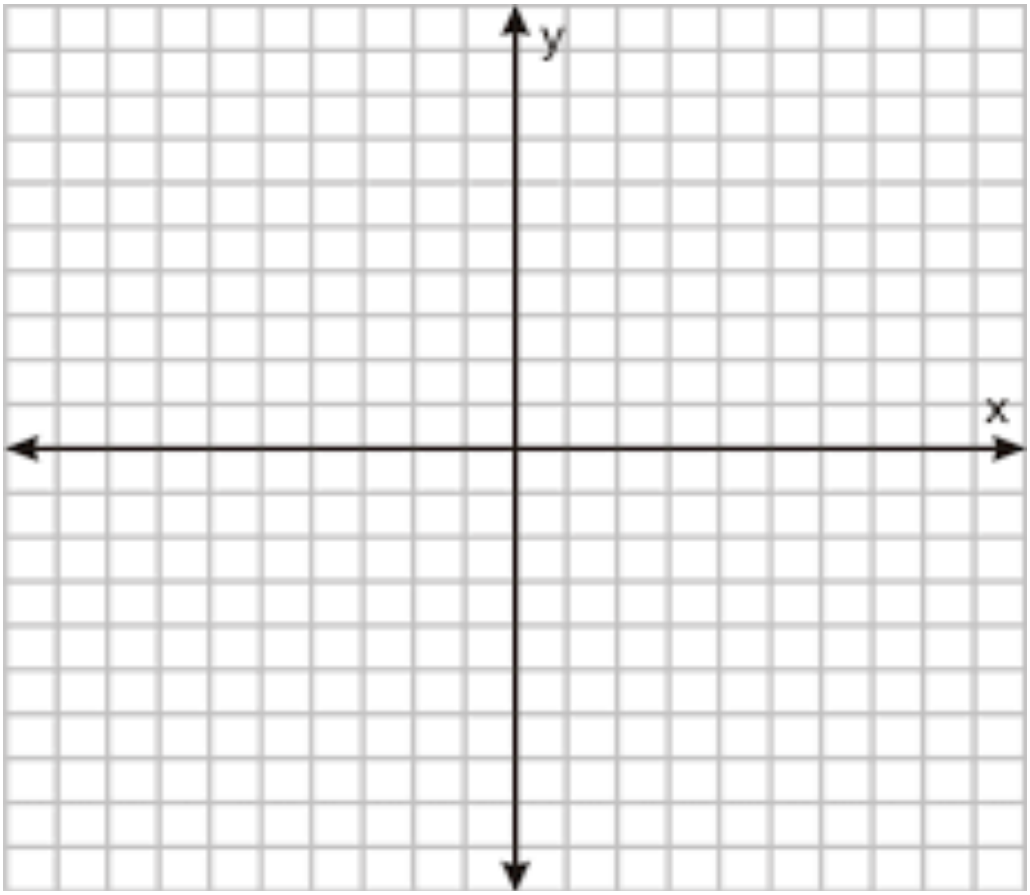
Please print this out and complete the assignment. If you don't have a printer than use a piece of graph paper to complete the five problems.

1) Plot the pairs of points, and find the length of the segments created:

a) (-2, 5) (-2, -4) length:_____
b) (-5, 3) (1, 3) length:_____
c) (0, 7) (0, 0) length:_____
d) (6, 0) (-3, 0) length:_____



2) Graph and label the following points: A (-2, -2) B (-2, 3) C (3, -2)

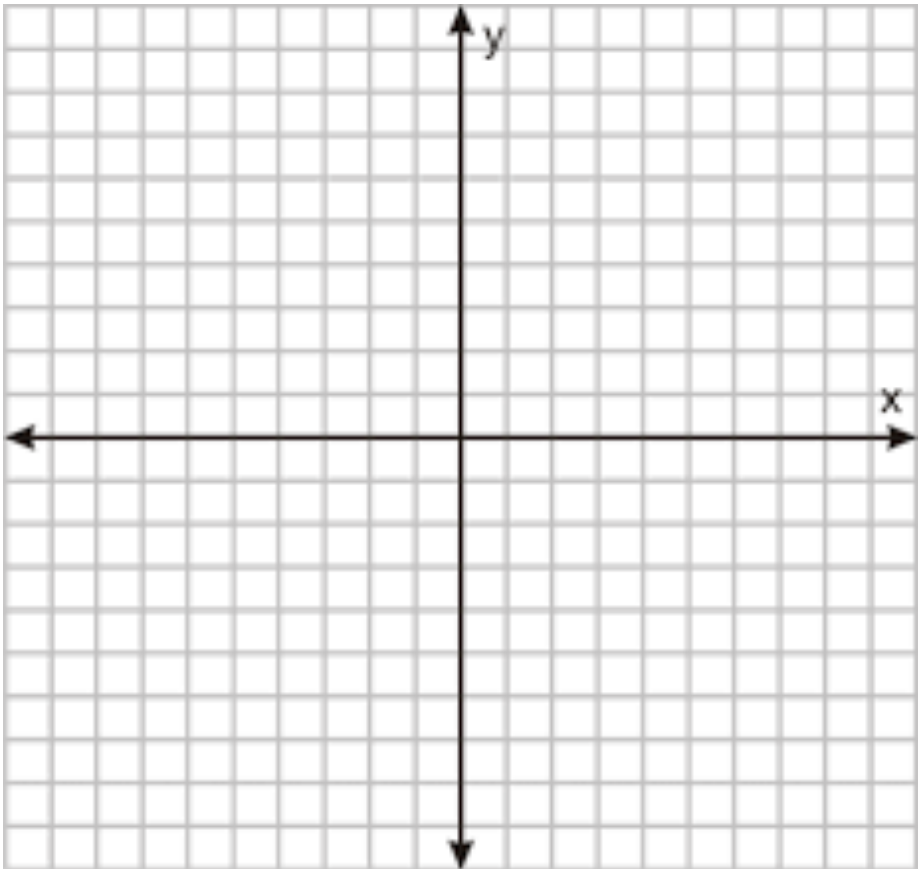


To make this a rectangle, where would point D lie?

How long is segment AB? _____
How long is segment AC? _____
How long is segment BD? _____
How long is segment CD? _____

What is the area of rectangle ABCD? _____
What is the perimeter of rectangle ABCD? _____

3) Graph and label the following points: P (1, 0) S (5, 0) T (5, 8)

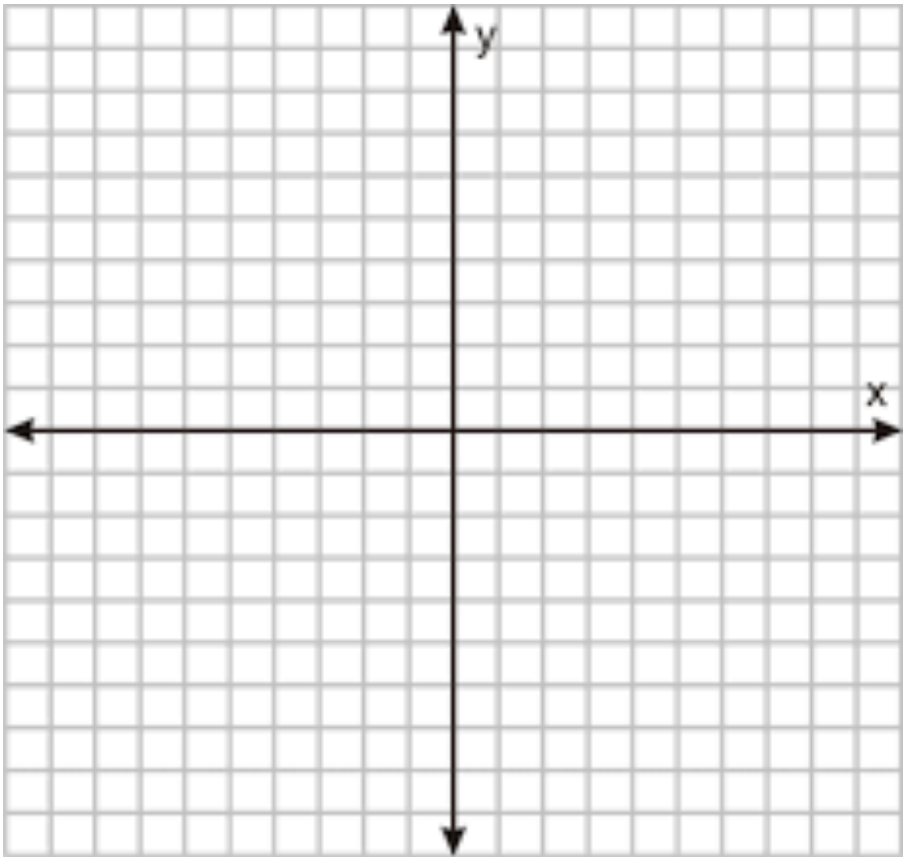


To make this a rectangle, where would point N lie?

How long is segment PS? _____
How long is segment ST? _____
How long is segment TN? _____
How long is segment NP? _____

What is the area of rectangle PSTN? _____
What is the perimeter of rectangle PSTN? _____

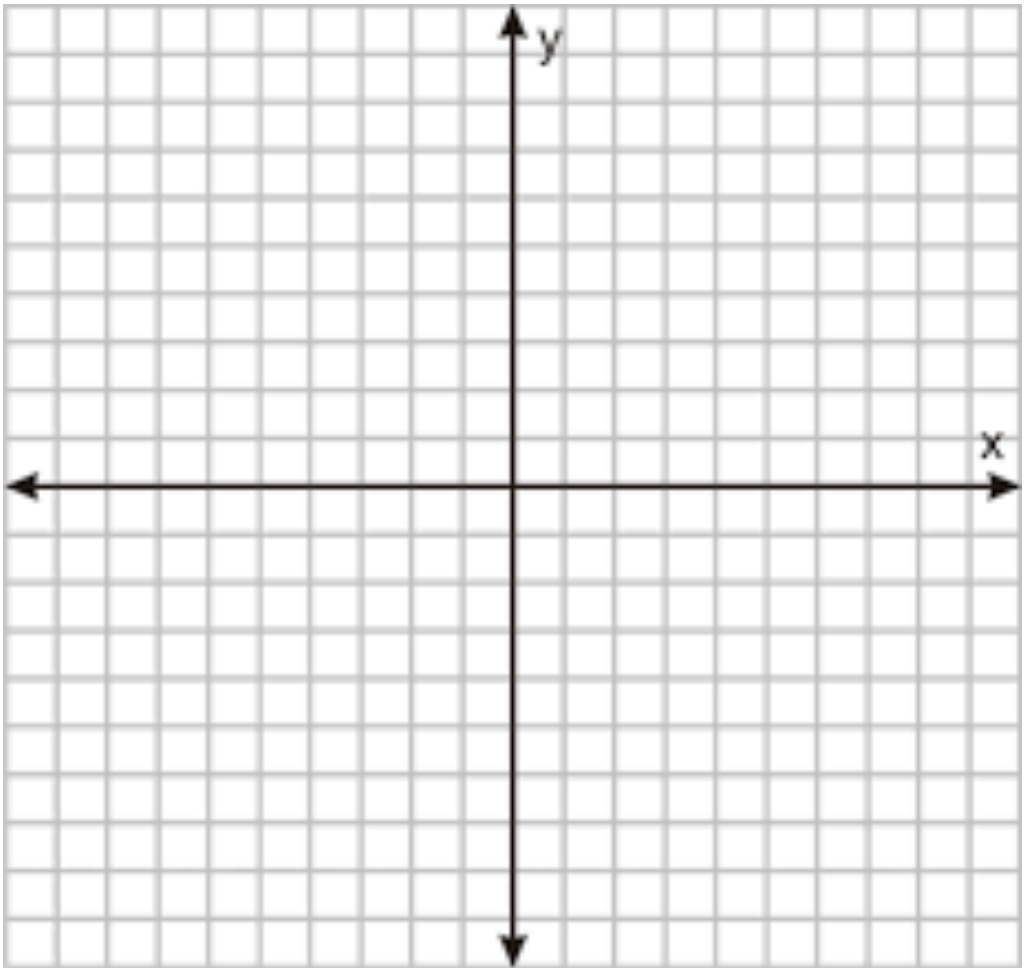
4) Graph and label the following points: C (-8, -2) A (-7, 2) R (-2, -2)



To make this a *parallelogram*, where would point S lie?

How long is segment SA? _____
How long is segment CR? _____

5) Graph and label the following points: B (-2, -2) X (3, -2) L (5, 3)



To make this a *parallelogram*, where would point Z lie?

How long is segment ZL? _____
How long is segment BX? _____