

# FINDING THE LENGTH OF LINE SEGMENTS

## STEP 1

Look at your coordinates. Cross out either the x's or the y's, whichever numbers are the same.

## STEP 2

Look at the two remaining coordinates. Find the difference between them.

## TIPS

\* If the two remaining numbers are both negative or both positive, use subtraction to find their difference.

\* If the two remaining numbers have one negative and one positive, use addition to find the difference.

## EXAMPLE QUESTIONS

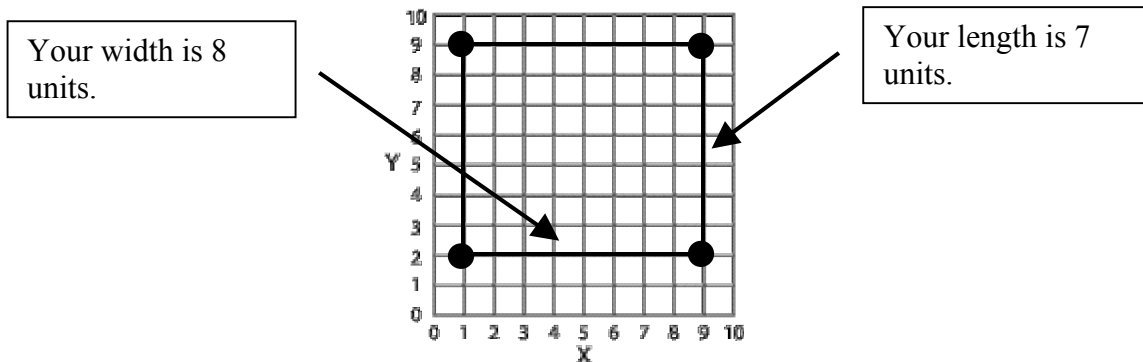
1. If point A is at (3,3) and point B is at (7,3), what is the length of  $\overline{AB}$ ?

*Cross out the two coordinates that are the same (here, they are your y's). Find the difference between your x's.  $7 - 3 = \underline{\quad}$  units. The length of  $\overline{AB}$  is 4 units.*

2. On a coordinate grid,  $\overline{CD}$  is 8 units long. C is at (3,5) and D is at (3, ?). Which of these could be the missing coordinate?

*Cross out the two coordinates that are the same (here, they are your x's). Use the same formula to find the missing number.  $\underline{\quad} - 5 = 8$  units. The coordinates for D are (3, 13).*

3. Plot point A at (1,2), point B at (9,2), point C at (9,9), and point D at (1,9). What is the perimeter of rectangle ABCD?



*Draw all points on the graph. Count the number of units around the outside (perimeter). Be sure to count both lines for each corner of your rectangle. Do not count the squares -- count the sides of the squares! Here, your perimeter is 30 units.  $8 + 8 + 7 + 7 = 30$  units.*