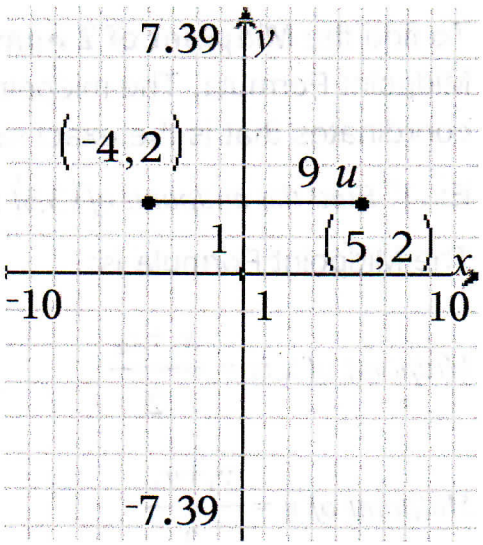
When you have 2 points, it is very easy to find the distance between them. One way is to count the spaces between the points. As you can see on the first graph, the 2 points are (−3,2) and (5,2). If you count the lines between them, you will get 9.



However, in a more complex coordinates, you will find it more challenging to find their distances, such as in Ex.2.

To find the distance for this one, as well as the first example, you use what is called the **Distance Formula.** The distance formula is as followed:

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

To find the distance, you need the points of the 2 coordinates, which are: (−5,5) and (4,−4).

Then plug in the points:

$$d = \sqrt{(-5-4)^2 + (5-(-4))^2}$$

$$\sqrt{(-5-4)^2 + (5-(-4))^2} \blacktriangleright 12.7279$$

The distance is about 12.7.