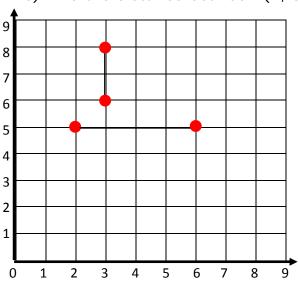
## **Using Graphs To Solve Real World Problems - Step-by-Step Lesson**

We are trying to find the distance between points in a large city. Each unit signifies a city block.

- a) Find the distance between (3, 6) and (3, 8).
- b) Find the distance between (2, 5) and (4, 5).

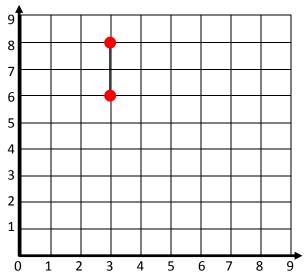




## **Explanation:**

Step 1a) First we look to see what is being asked of us.

Find the distance between (3, 6) and (3, 8).



Step 2a) (3, 6) and (3, 8) have the x-coordinate, y-coordinate. The x coordinate is the same (3), so there is no difference in distance on the x.

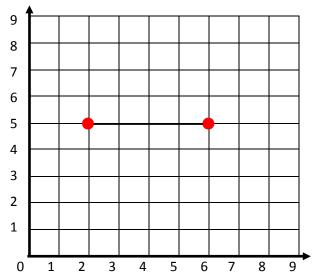
On the y-coordinate there is a positive difference between 6 and 8 or 2.

Step 3a) Each unit signifies a city block.

So the answer is 2 blocks.

Step 1b) First we look to see what is being asked of us.

Find the distance between (2, 5) and (6, 5).



Step 2b) (2, 5) and (6, 5) have the x-coordinate, y-coordinate. So, the distance between them is just the positive difference between their x-coordinate, y-coordinates.

The y-coordinates are the same unit (5), so there is no change in distance.

The x-coordinate has a positive difference between 2 and 6 is 4.

Step 3b) Each unit is a block.

So, the answer is 4 blocks.