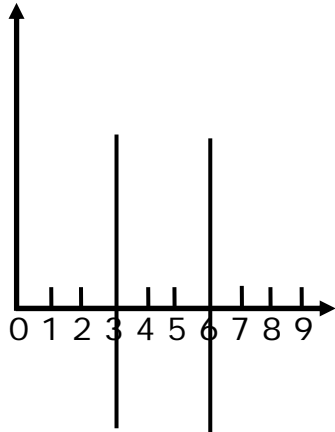


**Analyzing Functional Relationships by Graphing - Guided Lesson Explanation****Explanation#1**

We can plot this function in graph.



Since there is no value for  $y$ , they are just vertical linear graphs at those  $x$  values.

**Explanation#2**

We calculate the rate of change by determining the slope.

$$\text{Rate of change} = \frac{14 - 10}{2 - 1} = 4$$

$$\text{Rate of change} = \frac{16 - 14}{3 - 2} = 2$$

$$\text{Rate of change} = \frac{25 - 16}{4 - 3} = 9$$

The rate of change is not constant. So it is a non-linear function.

**Explanation#3**

This one might be a little too easy! The word "linear" is synonymous with the word "line". It is a linear graph because it is a straight line.

