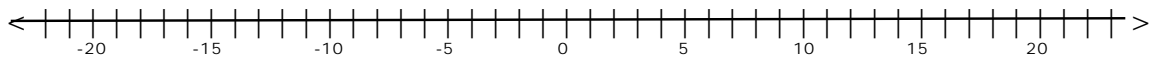


A number line is an example of a visual model.  
 A number line can show number relationships and number operations.  
 A good number line presents information clearly to the reader.

- A good number line has three properties:
- 1 - an origin - a reference point or starting point
  - 2 - a uniform scale or standard unit
  - 3 - agreement on order or direction

The number line below satisfies the three properties.



- 1 - Zero is the starting point.
- 2 - The vertical marks are called tick marks. The numeric labels indicate the number values corresponding to the tick marks. The space between any two adjacent vertical marks represents a difference of one unit.
- 3 - Number values become larger as you move to the right on the line. Number values become smaller as you move to the left on the line. The arrows  $<-$  and  $->$  indicate that the number line and number values continue.

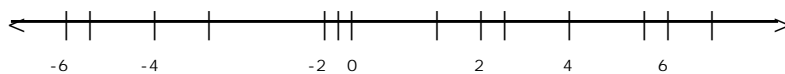
1. This number line also satisfies the three properties.



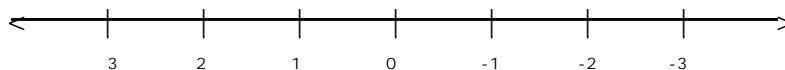
The reference or starting point is \_\_\_\_\_

The space between any two adjacent tick marks represents \_\_\_\_\_ units.  
 There are no arrows because the focus is only the years from 1900 to 2000.

2. Decide whether each number line is a good visual model.  
 Indicate your response by choosing Y or N .



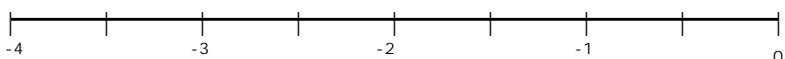
Y    N



Y    N



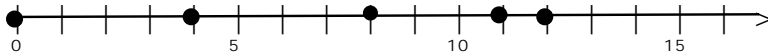
Y    N



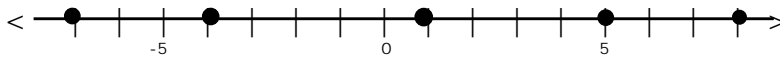
Y    N

A number line can be used to show one or more selected number values. Each selected number is indicated with a ● at the corresponding position. The ● is the graph of the number. The resulting picture is called a number line graph.

The number line below shows the graph of the numbers 0,4,8,11 and 12.

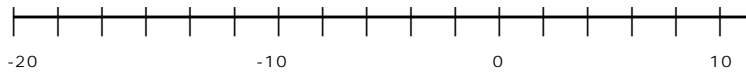


3. List the numbers graphed on this number line.

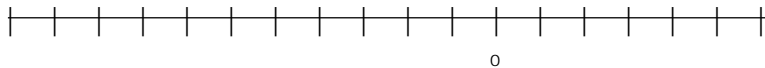


\_\_\_\_\_

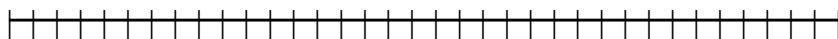
4. On this number line show the graphs of 0,2,4,6,-2,-4,-6.



5. Label this number line and show the graphs of 5,-4,0,-9 and 3.



6. Label this number line and graph 60, 75, 53, 68 and 80.



7. Choose five integers between -10 and +10 .

\_\_\_\_\_

Construct a number line model, label it properly and graph your five numbers.

\_\_\_\_\_