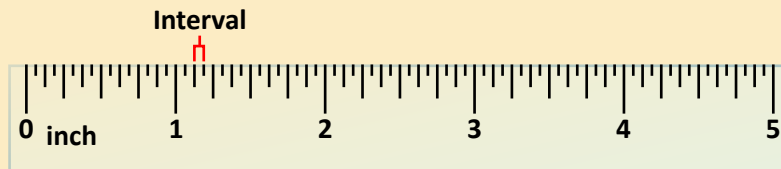


### Measuring Lengths in Inches

**Length** is most commonly referred to as the longest dimension of an object. For example, length of a pencil, length of a rectangles, length of a book, and so on.

**Rulers** are common instruments for measuring lengths. Most rulers do not bend and that makes them reliable for measuring segments.

A ruler can be thought of as a type of number lines. The ruler below measures in **inches**. Recall that the marks on a number line are called **tick marks**. The distance between two tick marks is called the **interval** of the ruler.

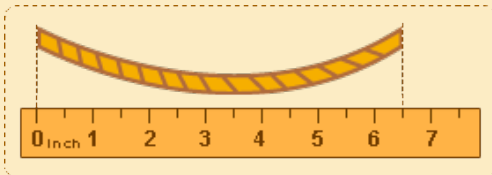


When we measure an object using a ruler, we line one end of the object **against the zero mark** on the ruler, and then pick the mark on the ruler which is **closest** to the other end of the object.

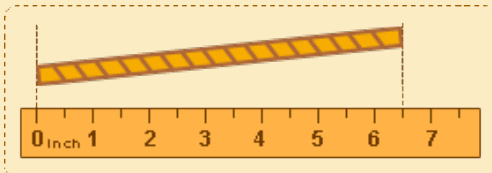


Of the following examples, only **C** is correct way to measure.

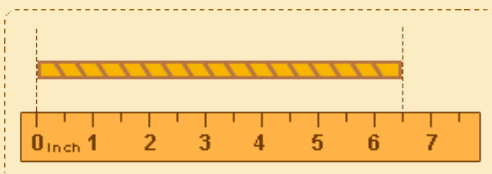
A.



B.

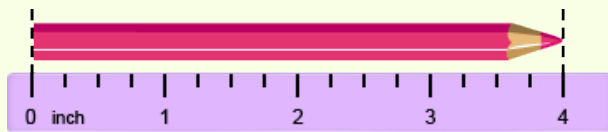


C.



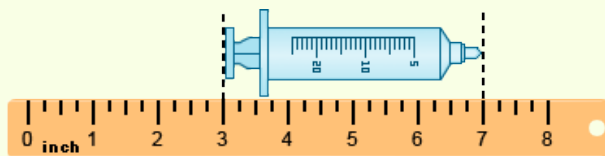
### Example 1

The following pencil's length is **4 inches**.



### Example 2

How long is the object?



### Explanation

If we did not start from the zero when measuring, the rule of thumb is to **calculate the difference between the marks of the object**. In this case, two marks are **3 inches** and **7 inches**, respectively. So the length is  **$7 - 3 = 4$  inches**.