Answer on Question #55594-Physics-Other

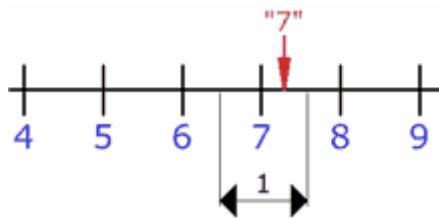The maximum possible error in a measurement is

Answer

The maximum possible error in a measurement is the one-half of difference between maximal and minimal possible value of physical quantity.

$$MPE(X) = \frac{\max X - \min X}{2}.$$

And we usually write for such quantity:

$$\bar{X} \pm MPE(X).$$

For example: When your instrument measures in "1"s then any value between 6½ and 7½ is measured as "7"

When the value could be between 6½ and 7½

$$7 \pm 0.5$$

The maximum possible error is ±0,5.