<u>A small problem</u>

The number ZERO has several uses. It may be a measured number, but it may also be a mere "placeholder" that wasn't measured at all!

So how do we tell a measured zero from a placeholder? There are a few ways:

1: BEGINNING ZEROS: Beginning zeros are NEVER considered significant.

2: END ZEROS are sometimes considered significant. They are significant if

- there is a WRITTEN decimal point in the number

10.01 Km

- there is another written indicator that the zero is significant. Usually this is a line drawn over or under the last zero that is significant!

This zero IS considered significant. There's a written decimal.

± 100m

These zeros ARE NOT considered significant (no written decimal, and no other indication that the zeros are significant)

$$500g \pm 100g$$

Km

m

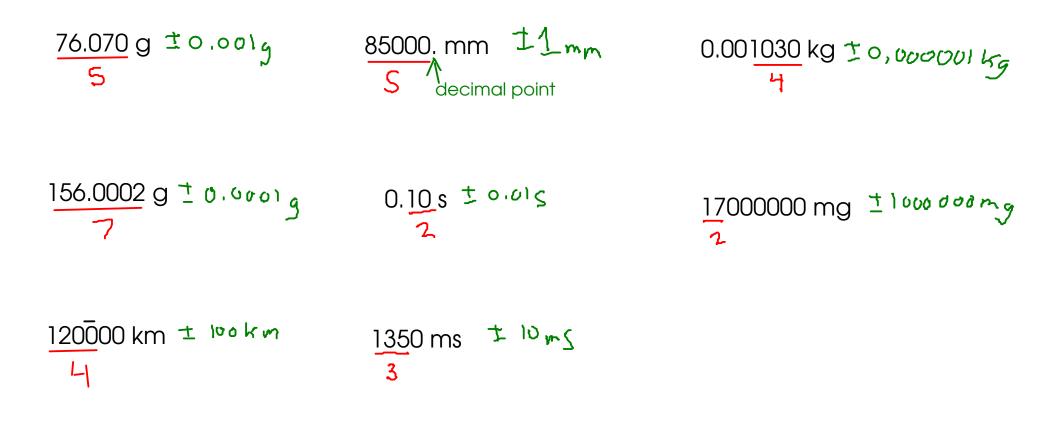
3

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These zeros are not significant.

This zero IS significant. It's marked.

How many significant figures are there in each of these measurements?



(Number of significant figures is indicated in RED below each measurement. Significant digits are UNDERLINED.)

(Approximate uncertainty in each of these measurements is indicated in GREEN after each one.)