

Example

Using a certain ruler, the width of a calculator is measured as 2.755 in. The smallest increments marked on this ruler must be smaller than what number?

The measurement is given to three decimal places. The last digit of a measurement is estimated, so in order to have a measurement with three decimal places, the ruler must have a smallest increment with at least two decimal places. Therefore the smallest increments marker on the ruler must be at most 0.01 in.