

Quiz: Error in Measurement

A part of a washing machine is to have a width of 2.4 inches and length of 5 inches \pm 0.3 inch.

- 1 What is the upper limit of the range of tolerance for length?
- 2 What is the lower limit of the range of tolerance for width?
- 3 Find the relative error in the length of that part of machine?
- 4 Find the absolute error in area of that part of machine?
- 5 Find the percent of error in area of that part of machine?

A cylindrical bottle containing juice is 15 cm long and 3 cm wide to the *nearest cm*.

- 6 What may be the possible range for the actual length?
- 7 What is the relative error in the volume of the bottle?
- 8 What is the absolute error in the volume of the clock?
- 9 What is the maximum possible value of the volume of the bottle to the *nearest ten*?
- 10 What is the percent of error in the volume of the bottle?

Circle # Correct	0	1	2	3	4	5	6	7	8	9	10
Percentage Score	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%