

CONCEPT: MEAN EVALUATION

The _____ measures how close data results are in relation to the mean or average value.

$$s = \sqrt{\frac{\sum_i (x_i - \bar{x})^2}{n - 1}}$$

_____ = Individual Measurement

_____ = Number of Measurements

_____ = Average or Mean

_____ = Degrees of Freedom

_____ = variance

_____ = Relative Standard Deviation
(Coefficient of Variation)

EXAMPLE: Data below gives the volumes obtained by a chemist from the use of a pipet. Determine the standard deviation.

24.9 mL, 25.0 mL, 24.8 mL, 24.6 mL, 24.6 mL, 24.3 mL

Volume (x_i)	Difference from the mean ($x_i - \bar{x}$)	Difference from the mean squared ($x_i - \bar{x})^2$
	$\sum_i (x_i - \bar{x})^2$	