

# 1/8 Algebra - Downing

Bellwork Round to the nearest hundredth

1)  $1.298 \rightarrow 1.30$

2)  $2.4548 \rightarrow 2.45$

Round to the nearest thousandth

3)  $7.8258927 \rightarrow 7.826$

## 11.1B Measures of Spread (Variation)

A measure of variation (or measures of spread) is a measure that describes the spread, or distribution, of a data set.

Range and Standard Deviation are considered a measure of variation

Range = difference between highest and lowest values (highest - lowest)

Ex) Find the range: 40, 35, 45, 55, 60       $60 - 35 = 25$

Standard Deviation - of a numerical data set is a measure of how much a typical value in the data set differs from the mean. Standard Deviation is represented by the symbol "sigma"  $\sigma$

Ex)	Show A	Show B	Graphing Calculator
	Ages	Ages	STAT Enter $\rightarrow$ Put in List
	20 29	25 19	STAT CALC #1 Enter $\times 2$ (1-VarStat)
	19 22	20 27	Show A $\rightarrow \sigma_x = 4.2$ $\leftarrow$ Less Spread Out (Standard Deviation)
	25 27	22 25	
	27 29	27 22	Show B $\rightarrow \sigma_x = 7.5$ $\leftarrow$ More Spread Out
	30 20	48 21	
	21 31	32 24	

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