

## TOPIC: MEAN

### Calculating the Mean

◆ Find the **mean** (a.k.a. “average”) by \_\_\_\_\_ all values, then \_\_\_\_\_ by the total # of values.

$$\bar{x} = \frac{\quad}{\quad}$$

► Mean is a “**Measure of Center**”, it summarizes a data set in \_\_\_\_\_ “central” value.

### EXAMPLE

Find the mean of each data set.

New	Mean
(A) Sample: {5, 10, 12, 14, 3}	(B) Population: {5, 10, 12, 14, 3, 76}
	► You may see $\mu$ for $\bar{x}$ , $N$ for $n$

◆ While the mean uses *all* values in a data set, \_\_\_\_\_ values (outliers) can change it A LOT.

### PRACTICE

A retail store sells different models of a smartphone (prices shown below). Find the mean price.

Price of Smartphone (in \$)					
799	899	749	950	870	820

**Recall**

$$\bar{x} = \frac{\sum x}{n}$$

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EXAMPLE

The data below shows heart rates (in beats per minute) from a sample of adult males and females. Does there appear to be a difference in mean heart rates?

Heart Rates (beats per minute)										
Males	84	70	68	59	61	77	90	65	56	72
Females	80	73	88	91	69	85	91	81	79	77

Recall

$$\bar{x} = \frac{\sum x}{n}$$