

# MEAN

WHAT: AVERAGE

Best if  
**NO**  
outliers

HOW:  $\frac{\text{sum of ALL data values}}{\# \text{ of data values}}$

EXAMPLE: 9.99, 6.50, 9, 4.50, 7, 8, 8, 4, 9.99, 28

$$\frac{94.98}{10} = 9.498$$

or  
\$9.50

An OUTLIER can skew the mean. Identify one: \$28

# MEDIAN

WHAT: MIDDLE #

If there appears to be two #s in the middle, their MEAN is the median

HOW: Put in order  $\square \Rightarrow \textcircled{C}$  find center

EXAMPLE: ~~4~~, ~~4.50~~, ~~6.50~~, ~~7~~, ~~8~~, ~~8~~, ~~9~~, ~~9.99~~, ~~9.99~~, ~~28~~

$$= 8 =$$

(best with outliers)

## MEASURES OF CENTRAL TENDENCY

Values that represent or typical item in a dataset ... are called the

and they include...

mean, median + mode **★ NOT RANGE**

# RANGE

WHAT: "SPAN" OF THE DATA

HOW: SUBTRACT  $\rightarrow$  greatest  $\leftarrow$  MINUS  $\leftarrow$  Least

EXAMPLE:  $28 - 4 = 24$

★ Range is NOT a measure of central tendency

# MODE

WHAT: value appearing

## MOST

HOW: JUST COUNT

There can be one mode, no mode, or more than 1 mode

EXAMPLE: (best for non-numerical data)

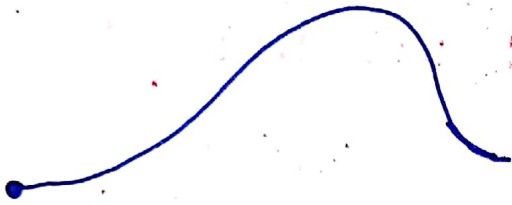
\$8 & \$9.99

(both appear twice)

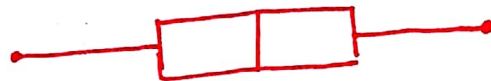
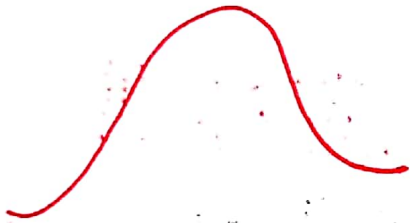
# SKEWED DATA

Data that is pulled in one direction by an outlier

Negative Skew: Data being pulled to the left by an outlier



NO SKEW: Data that is symmetrical



Positive Skew: Data being pulled to the right by an outlier

