## Entrance Question

On a blank piece of notebook paper...

Josh's test scores follow:

$$
95,89,87,95,86, \text { and } 88
$$

If Josh could have his choice of the three measures of center to be his final grade, which measure of center should he choose?

## Measures of Spread: Interquartile Range

Test Grades:
$60,75,75,80,80,80,85,85,85,85,85,90,90,90,95$


What is Q1? What is Q2 (median)? What is Q3?

## Measures of Spread: Interquartile Range

Test Grades:
$60,75,75,80,80,80,85,85,85,85,85,90,90,90,95$


What is range? $\qquad$ What is the IQR?

## Measures of Spread:

Which data set do you think has MORE variability?

Set A: $12,14,15,15,19,19,20,26$

Set B: 16, 16, 19, 19, 20, 22, 22, 26

## Measures of Spread:

Range

Interquartile Range (IQR)

Mean Absolute Deviation (MAD)

# Mean Absolute Deviation "The average distance from the mean" 

$$
2,8,12,12,14,19,21,24
$$

Step 1: Find the mean.

Step 2: Find each value's distance from the mean.

Step 3: Find the mean of those distances.

## More variability? (MAD)

Set A: 12, 14, 15, 15, 19, 19, 20, 26
Distance
from Mean

Mean:
MAD:

Set B: 16, 16, 19, 19, 20, 22, 22, 26 Distance
from Mean

Mean:
MAD:

