Name: _____ Date: _____

Measures of Central Tendency Mini-Lesson

Today's Learning Goal: *At the end of today's lesson, you should be able to find the mean, median, mode, and range of a set of data.*

A **measure of central tendency** is a measure that represents the _____ of a data set. The three measures of central tendency are _____, _____, and _____.

Mean: _____

Median: _____

Mode: _____

The purpose of central tendencies is to use one number to _____ a set of data.

Which measure should I use to describe a set of data?

- Use the **mean** to describe the data if the set has no _____ _____ (values that are much less or much more than those in the group).
- Use the **median** to describe the data if the data does have extreme values and there are no large _____ in the middle of the data.
- Use the **mode** to describe the data if the data set has many _____ numbers.

An **outlier** is _____
_____
_____

A **measure of dispersion** is a measure that describes the spread of a data set. The simplest measure of dispersion is the _____.

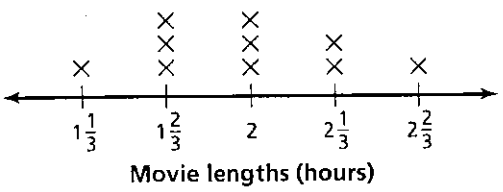
The **range** of a data set is _____
_____.

Examples: *Find the mean, median, mode, and range of each data set.*

A.

Golf Scores		
3	−2	1
6	4	−1
−3	−1	2

B.



Movie lengths (hours)

C.

Available Memory

Stem	Leaf
6	5
7	0 5 5
8	0 4 5
9	4

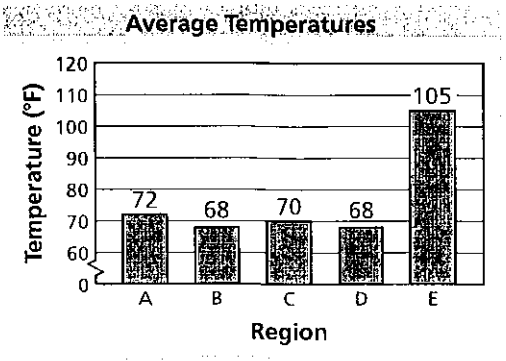
Example: *Below are the hourly wages for several students. Find the mean, median, and mode of this set of data. Then, identify the outlier.*

Students' Hourly Wages	
$3.87	$7.25
$8.75	$8.45
$8.25	$7.25
$6.99	$7.99

What would happen to the mean, median, and mode if the hourly wages were increased by 40 cents each?

Example: *Find the value of X if the mean is 6 of the following set of data: 2, 8, 9, 7, 6, X*

Example: *An environmentalist records the average temperatures of five regions.*



A. What is the outlier?

B. Which measure of central tendency will be most affected by removing the outlier?

Progress Monitoring: *How do you feel about your level of understanding of solving problems involving the measures of central tendency?* (Rate yourself from 0 (don't understand at all) to 10 (doing awesome))