18.1 Effects of an Outlier

Name:_____

2.

Effect:

3.

- a) Circle the outlier in each problem below.
- b) Determine the mean, median, mode, and range of the data set without the outlier.
- c) Determine the mean, median, mode, and range of the data set with the outlier.
- d) Describe the effect the outlier has on the mean, median, mode, and range.

1. 3, 2, 6, 4, 3, 5, 16

	Without Outlier	With Outlier
Mean		
Median		
Mode		
Range		

	Without	With
	Outlier	Outlier
Mean		
Median		
Mode		
Range		

20, 17, 19, 22, 18, 17, 5

Effect:

3. 42, 38, 45, 68, 40, 39, 39, 41,

	Without	With
	Outlier	Outlier
Mean		
Median		
Mode		
Range		

Mean Median Mode

Range

Effect:

5. 4, 2, 8, 5, 6, 20, 7, 9,

	Without	With
	Outlier	Outlier
Mean		
Median		
Mode		
Range		

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6. 105, 98, 101, 100, 99, 89, 40, 98

12, 24, 12, 15, 9, 11, 10, 13

Without

Outlier

With

Outlier

	Without Outlier	With Outlier
Mean		
Median		
Mode		
Range		