Effects of An Outlier

Circle the outlier in each problem below. Then calculate each measure without the outlier and with the outlier. Describe the effect the outlier has on each measure.

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

	Without Outlier	With Outlier	Effect
Mean			
Median			
Mode			
Range			
IQR			
St Dev			
Direction Skewed?	XXX	XXX	

2. 20, 17, 19, 22, 18, 17, 5

	Without Outlier	With Outlier	Effect
Mean			
Median			
Mode			
Range			
IQR			
St Dev			
Direction Skewed?	XXX	XXX	

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

	Without Outlier	With Outlier	Effect
Mean			
Median			
Mode			
Range			
IQR		40	
St Dev			
Direction	XXX	XXX	
Skewed?			

"Which measure of center (mean/median) or Spread (stader/IQR) is affected the most? The least?