| Outliers | Data value that is much greater than or much less than the rest of the data in a data set <br> If an outlier is present, you would use the median to describe the data, NOT the mean! <br> Formula: Lower Bound: Q1-1.5(IQR) Upper Bound: Q3 +1.5(IQR) |
| :---: | :--- |

1. Example: Identify any outliers in the data set. Then determine if the median or mean best represents the data sets.
a. $15,10,12,18,10,22$
b. $128,152,170,41,161$
c. $43,69,49,78,88,54,73,194,54,59,70$
d. $40,62,47,68,12,78,49,65,49,52,63$

Things to think about!!!!
2. Answer the following questions.
a) Find the outlier of the data set. $44,67,52,72,82,55,70,200,55,57,68$
b) What effect will the outlier have on the mean of the data if the outlier is excluded?
d) What effect will the outlier have on the mean of the data if the outlier is excluded?
e) Find the outlier of the data set. $46,39,38,47,45,34,83$
f) What effect will the outlier have on the mean of the data if the outlier is excluded?

