Name: Solutions
$\qquad$ Date: $\qquad$ Period: $\qquad$
Unit 12 Review - Descriptive Statistics
Reviews do NOT cover all material from the lessons but will hopefully remind you of key points. To be prepared, you must study all packets from Unit 12.
Several donations for the "Mr. Bean needs two new front teeth" fund were collected by his 5 th period class. Those donations (in dollars) are listed below.

$$
5,15,9,6,18,100
$$

Calculate the following values. A calculator may be used but show the work that leads to your answer.

| 1. Mean $\begin{aligned} & \frac{5+15+9+6+18+100}{6} \\ & \frac{153}{6}=25.5 \end{aligned}$ | 2. Median $\begin{aligned} & 5,6,9,15,18,100 \\ & \frac{9+15}{2}=\frac{24}{2}=12 \end{aligned}$ |
| :---: | :---: |
| 3. Mode <br> none | 4. Range $100-5=95$ |
| 5. Are there outliers? If yes, what number(s)? Yes, | 6. Mean Absolute Deviation $24.833$ |

7. List the mean and median in order from least to greatest for the following data set. You do not need to list the actual values.

median < mean
8. The following data represents the number of correct answers out of 150 problems for students in $1^{\text {st }}$ period and $2^{\text {nd }}$ period:
$1^{\text {st }}$ Period: 68, 68, 69, 70, 71, 74, 76, 78, 82, 86, 88, 90, 96, 104, 110
$\mathbf{2}^{\text {nd }}$ Period: 86, 87, 88, 90, 92, 94, 95, 99, 99, 99, 104, 104, 118, 124, 146

Compare the data sets of the test scores using sentences. Talk about SOCS!


## Possible Answer:

Shape: Distributions are slightly skewed right.

Outliers: $2^{\text {nd }}$ period may have an outlier at 146 .

Center: The median scores of $1^{\text {st }}$ period is lower.

Spread: Spread is about the same ( $2^{\text {nd }}$ period is slightly higher)

