

Algebra II, Quiz 17.1-17.2

For **1-4** find the mean and standard deviation of the data set.

1) 13, 14, 15, 17, 18, 18, 18

2) 1, 2, 3, 4, 5, 6, 7, 8, 9

3) 1, 1, 1, 1, 1, 2, 10, 10, 10, 10, 10

4) -12, 8, -13, 15, -60, 72, -23, 13

5) The **median** of a data set is another statistic of a data set. It is defined to be the **middle** value of a sorted data set, or the average of the two middle values if there are an even number of entries in the set. For instance, for the data set 1, 3, 100, 2 the median would be 2.5 (the average of 2 and 3, first sort the list then find the middle two and average since there are an even number of entries). Find the **median** of each of each of the data sets in **1-4**. How does the median compare to the average? Can you identify a pattern where the median is significantly different from the mean?

Review:

6) Solve the equation $1000(1.035)^t = 1200(1.03)^t$

7) Solve by completing the square: $-x^2 + 3x - 7 = 0$

8) State the definition of a functions

9) Provide the formula for the n th entry in a geometric series.