Measures of Central Tendency & Variation

Find the mean, median, and mode of each set of data.

1.) $\{5, 7, 4, 7, 6, 7\}$	2.) $\{2, 4, 4, 6, 6, 6, 7, 8\}$
3.) $\{10, 14, 18, 22, 26\}$	4.) $\{4, 16, 25, 9, 36, 49\}$
5.) $\{1, 7, 7, 2, 3, 14, 127, 8\}$	6.) $\{5, 10, 15, 20, 25\}$

Make a box-and-whisker plot of the data. Find the interquartile range.

7.) $\{3, 5, 2, 2, 8, 9, 1, 11\}$	8.) $\{2, 4, 1, 4, 2, 2, 7, 4\}$
9.) $\{33, 34, 31, 27, 22\}$	10.) $\{12, 15, 12, 6, 18, 29\}$
11.) $\{2, 2, 3, 8, 2, 8, 2, 42\}$	12.) $\{3, 4, 3, 1, 2\}$

Find the variance and standard deviation.

13.) $\{3,3,4,5,5\}$	14.) $\{10,12,14,15,18,20,23\}$
15.) $\{7,14,21,28,35,42\}$	16.) $\{4,4,4,4,5\}$
17.) $\{8,12,30,35,48,50,62\}$	18.) $\{14,26,40,52\}$

19.) **Measurement** Students in a fourth-grade class were asked to measure the widths of their desks in centimeters. They recorded the following measures: 49, 50, 49, 48, 49, 19, 50, 49, 48, 50, 49, and 50. Identify the outlier, and describe how it affects the mean and the standard deviation.

20.) **Football** The 2004 Cincinnati Bengals scored 24, 16, 9, 17, 17, 23, 20, 26, 17, 14, 58, 27, and 28 points in their first 13 games. Find the mean and the standard deviation of the data. Identify the outlier, and describe how it affects the mean and the standard deviation.