PROBLEM SET 12-3
(Analyzing Data)

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

1.   {5, 9, 1, 2, 7, 3, 1, 8, 8, 1, 3}

2.   {307, 309, 323, 304, 390, 398}

3.   {475, 722, 499, 572, 402, 809, 499, 828, 405, 499, 800, 422, 672, 800}

Make a box plot for each set of values.

4.   {12, 11, 15, 12, 19, 20, 19}

5.   {120, 145, 133, 105, 117, 150}

6.   {49, 57.5, 58, 49.2, 62, 22.2, 67, 52.1, 77, 99.9, 80, 51.7, 64}

Marsh supermarket recorded the length of time, to the nearest minute, that a sample of 200 cars was parked in their lot. The results were:

Time (minutes)	Frequency
0 – 14	13
15 – 29	23
30 – 44	32
45 – 59	33
60 – 74	27
75 – 89	20
90 – 104	12
105 – 119	11
120 – 134	10
135 – 149	11
150 – 164	8

7.   Draw an Ogive and use it to estimate the upper and lower quartiles

8.   Estimate the 80th percentile

9.   Estimate the percentage of cars parked more than 50 minutes

Use the IQR rule to identify the outlier of each set of values and then describe how its value affects the mean.

10.   {3.4, 4.5, 2.3, 5.9, 9.8, 3.3, 2.1, 3.0, 2.9}

11.   {17, 21, 19, 14, 15, 19, 14, 0, 11, 16}