

Pre-Algebra  
Statistics & Probability – Review sheet A  
Mean, Median, Mode, Range  
Stem & Leaf Plot  
Box & Whisker Plot

**Mean, Median, Mode, Range**

Calculate Mean, Median, Mode and Range

1. Bowling scores: 114, 136, 220, 245, 179, 150
2. Numbers of cars over a bridge in an hour: 24, 74, 83, 51, 43, 92, 76, 77
3. Numbers of people per family: 7, 4, 3, 2, 6, 4, 5, 2, 3, 4
4. Wages per hour: \$7.25, \$8.50, \$6.50, \$7.75, \$10

5. Choose best measure of central tendency for each set of data.

(Hints: Mode measure most frequent repeating number, Mean is affected by outliers, Median is not affected by outliers)

Choices are: Mean, Median or Mode (each used twice)

12, 14, 15, 14, 14, 14, 16, 14, 14	100, 120, 130, 125, 115, 121, 118, 111
10, 11, 13, 14, 16, 17, 15, 12, 14	120, 134, 120, 122, 120, 114, 120, 120
10, 11, 13, 99, 18, 0.1, 12, 14, 15	135, 145, 115, 125, 125, 110, 15, 110, 135

**Stem & Leaf Plot**

Make an ordered stem-and-leaf plot of the data.

Identify the interval(s) that include(s) the most data values.

1. 6, 4, 15, 19, 24, 34, 9, 21, 26, 37, 38, 42, 39
2. 982, 1024, 993, 984, 986, 997, 1005, 1019
3. 37.2, 38.4, 36.7, 39.1, 35.8, 37.4, 36.5

4. The stem-and-leaf plot shows the average number of pages read per night by the students in an English class.

What are the greatest and least number of pages read?

Which interval has the greatest number of students?

1	5 7 8 9
2	2 2 3 6
3	2 4 6 7 9
4	0 0 1 2
5	0 5

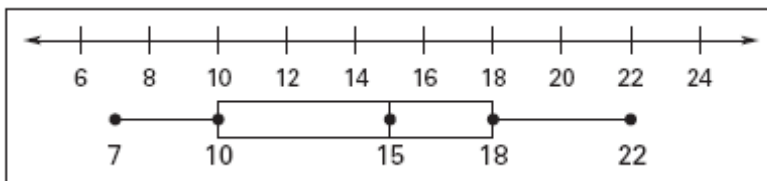
Key: 1 | 5 = 15

**Box & Whisker Plot**

Make a box-and-whisker plot of the data.

1. 3.9, 7.2, 1.6, 4.5, 6.2, 5.8, 5.3, 7.1
  
2. 120, 250, 70, 550, 225, 360, 480, 1100
  
3. The box-and-whisker plot shows the number of songs played by the school band for different functions during the school year.  
Give the value for:  

range	median
lower quartile	upper quartile
lower extreme	upper extreme



4. The box-and-whisker plots show the number of pages read per night by two different students.  
What conclusions can you make about the two students' reading abilities?  
Which student is more consistent with reading the same number of pages per night?  
Explain.

