Graphing Notes

Mean-(Average) The average of a set of numbers. To find add all numbers together and divide by the number of numbers you have.

Median- (Middle Number)
1)Place numbers in order from least to greatest
2) Cross off one number from each end until you reach the middle number.
3) If you have an odd set (amount) of numbers you will have one number in the middle.
4) If you have even set of numbers you will have two numbers left in the middle. Follow average rules for those two numbers.

Mode- The number that occurs the most. To find the mode find the number that occurs more than the others, there can be two modes, if there are no modes write none.

Range- The difference between the largest and smallest number. To find the range subtract the largest and the smallest number.

Stem and Leaf Plot example: The data: Math test scores out of 50 points: 35,

36, 38, 40, 42, 42, 44, 45, 45, 47, 48, 49, 50, 50, 50.

*The tens digit is the stem and the ones digit is the leaf

The number 38 would be represented as

Stem	Leaf
3	8

Math Test Scores (out of 50 pts)	
Stem	Leaf
3	5 6 8
4	0 2 2 4 5 5 7 8 9
5	0 0 0

Line Graph: Shows change over time!

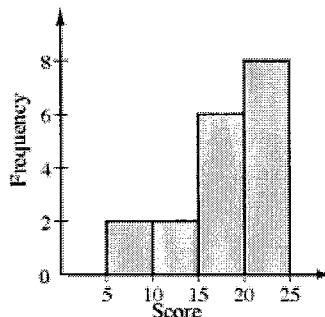# Histogram- Bars touch each other, intervals are given at the bottom

The scores for a 25-point quiz are listed below arranged from least to greatest.

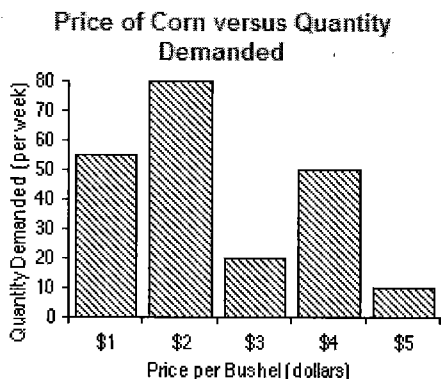7, 7, 12, 13, 15, 16, 16, 16, 18, 19, 20, 20, 20, 21, 21, 22, 23, 23, 24

Using intervals of five points, create a histogram for the class.

See histogram at right. Scores on the right end of the interval are included in the next interval. The interval between 10 and 15 only includes the two scores of 12 and 13. The interval between 15 and 20 only includes the six scores of 15, 16, 16, 16, 18, and 19.

Circle Graph or Pie Graph – Used to compare a part to a whole. Usually shows percents.

Bar Graph-Compares the amounts of frequency or similar items, used to make a quick generalization about data .

Price of Corn versus Quantity Demanded

Box and Whisker Plot

1) **Put data set in numerical order**

    18 27 34 52 54 59 61 68 78 82 85 87 91 93 100

2) **Find Median 68**
3) **Find Median of lower quartile 52**

4)**Find Median of upper quartile   87**

5) **Interquartile range (IQR)   To find the IQR take the upper quartile –lower quartile= IQR Useful because less influenced by extreme values. 87-52=35**

18 first data number

100….. last data