1. What is the population, sample, and variable in the following scenarios?
   1. Hershey measures the weight of 3000 bags of chocolate kisses.
   2. In a study on leukemia, a research team gives 64 patients a trial drug.
2. An ecology team catches 25 wolves, tags them, and releases them back into their habitat. A month later, they return and catch 16 wolves, 10 of which are tagged. How many wolves are in the total population?
3. 0 0 1 1 5 5 5

1 1 3 6 7 8

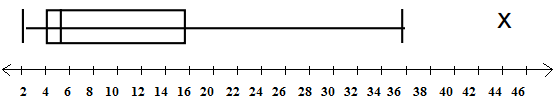
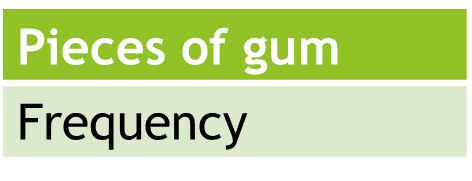
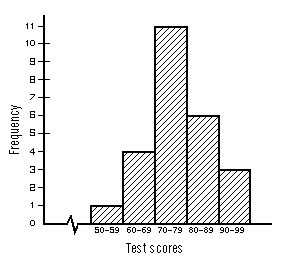
2 0 1 3 3 3 6 7

3 2 3 5 5 7 9

4 3 4 8

5 4

What is the median for the data above? The mode?

1. Given the box and whisker plot showing inches of rain last month, answer the following questions.
   1. Between what values is the middle 50% of the data?
   2. What percent of the data is between 2 and 4 inches of rain?
   3. Where is the max of this data set?
2. The following frequency table shows the number of pieces of gum chewed in a week.
   1. What is the median of the data?
   2. What is the relative frequency of 3 pieces of gum?
   3. What percentile is 1 piece of gum?
   4. What is the 80th percentile?
3. 
   1. Approximate is the median of the data in the histogram above.
   2. What is the percentile of a score of 83? (hint: 83 is in the 80-89 interval)
4. The amount of M&Ms in a 5 lb bag of peanut butter M&Ms follows the distribution N(5, .15).
   1. Construct a bell curve and use it to answer the following questions.
   2. 95% of bags of M&Ms are between what weights?
   3. What weight would a bag at the 97.5th percentile be?
   4. What weights are in the upper 16% of data?
   5. What percent of bags are between 4.7 lbs and 5.15 lbs?
5. The math SAT scores for males is N(532, 119).
   1. What percent of males scored between a 500 and 600?
   2. What percent of males scored above a 700?
6. The reading SAT scores for females is N(493, 112)
   1. What percentile is a female who scored a 600?
   2. What is the score of a female who scored in the 80th percentile?
   3. What range of scores is in the middle 65% of the data?