Stat 1350, Quiz #5, Spring 2015   Name ___ *KEY* ___

Instructions: Answer each question completely. Show all work for any computational questions.

1. The data displayed in the tables below, is it quantitative or categorical?

a.

Class	Frequency
Freshman	56
Sophomore	72
Junior	61
Senior	59
5+	15
Non-degree	23

Categorical

b.

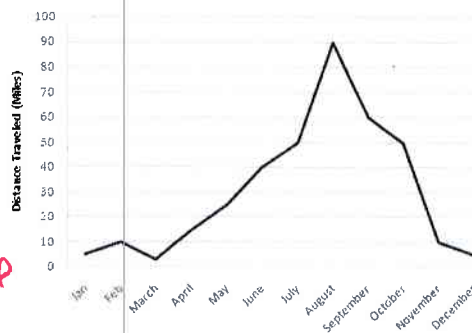| Length of Movie	Average Box-Office Draw
80-89 min	$120 million
90-99 min	$178 million
100-109 min	$231 million
110-119 min	$198 million
120-129 min	$247 million
130+ min	$211 million

Quantitative

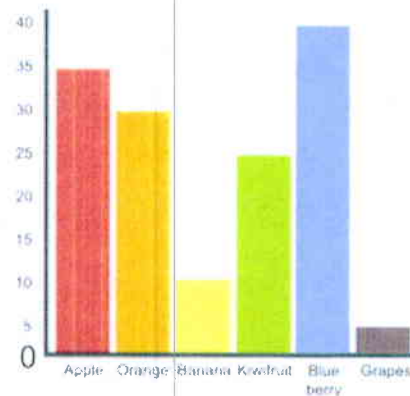2. Why are pictograms generally a bad idea when making graphs?

they usually scale in 2 dimensions rather than just one while numbers scale generally only in 1D, so they are deceptive

3. For each of the graphs below, say what kind of graph it is. Is the data plotted categorical or quantitative?

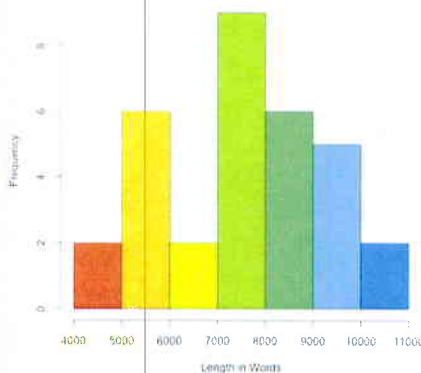Average Monthly Precipitation (In Inches)
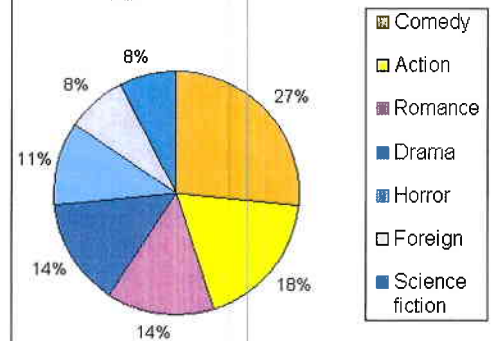
line graph quantitative

bar chart or Pareto chart Categorical

Length of Greek Tragedies in Words

histogram or bar chart quantitative

Figure 5. Favourite movie genres in Mrs. Smyth's Film class

- Comedy
- Action
- Romance
- Drama
- Horror
- Foreign
- Science fiction

27% 18% 14% 14% 11% 8% 8%

pie chart Categorical