Math 227 – Winter 2011 – Project #1

You will use MINITAB 14 or 15 and the data given to perform the following.

1.) Given the data from the example given in class:

The scores on the first test of a statistics class in fall of 2008 are as follows.

76	**78**	**71**	**86**	**80**	**62**	**55**	**89**	**66**	**72**	**68**	**96**
78	**81**	**82**	**69**	**89**	**88**	**85**	**86**	**79**	**73**	**58**	**85**
99	**90**	**66**	**76**	**70**	**63**	**79**	**88**	**59**	**55**	**75**	**86**
92	**92**	**62**	**83**	**52**	**94**	**93**	**80**	**78**	**97**	**50**	**88**
60	**61**										

a. Display the Descriptive Statistics. Display only the size of the data set, Mean, standard deviation, variance, min, Q1, Median, Q3, max and the IQR.
b. Graph a histogram with 5 classes. Display all class midpoints.
c. Graph an ogive with 5 classes. Display all class midpoints.

2.) The following data are the final grades a Math 227 class.

B	C	C	F	D	D
D	F	A	C	D	C
C	F	A	B	D	C
B	B	C	C	C	D
F	B	C	C	D	D
B	C	C	D	D	D
F	F	A	B	C	C

Input the grades in a column in MINITAB in one column.

a. Graph a bar chart and Pareto Chart for the given data.

You may have to "code" the data.

3.)

On MINITAB, go to Calc>Random Data>Integer... Generate 50 rows of data in a new column of MINITAB 14 with Minimum Value of 100 and Maximum Value of 200.

a. Construct a Stem-and-Leaf using the values that you generated.

4.) The Data lists the yardage of hitting 200 golf balls with my R9 driver at the practice range.

Compute the following:

a. Mean

b. Variance

c. Standard Deviation

d. Median

e. Range

f. Relative Frequency Histogram with 8 classes. Display all cut points.

g. Does the data seem to have a normal distribution?

h. Use a box plot with a 5-number summary.

i. Determine the standard score for 295.234 yds.

Driver Yds with R9 Driver

266.906	274.218	293.354	262.195	292.712	287.614	274.959	265.748
281.318	301.573	285.132	282.746	268.223	277.754	267.437	274.924
296.67	273.201	255.902	249.504	257.5	262.91	268.056	259.035
280.155	306.875	283.801	282.556	250.026	289.102	270.361	277.695
269.242	269.025	272.265	308.646	294.033	282.566	271.264	288.701
294.823	266.391	282.403	258.1	272.09	264.026	275.948	265.525
280.536	264.634	293.637	280.977	273.691	257.917	273.304	282.212
273.756	270.904	295.234	245.426	298.916	257.713	265.853	253.735
267.753	257.261	260.536	270.509	271.729	270.302	244.868	278.504
283.202	283.186	288.22	265.227	263.07	271.29	268.811	279.064
288.673	280.409	269.189	274.143	278.45	288.112	288.773	275.325
244.679	284.403	281.58	286.34	288.612	268.066	243.78	285.414
269.026	303.282	294.886	256.531	290.08	266.998	296.912	276.022
257.327	283.905	290.358	291.3	282.709	243.798	273.81	277.55
267.721	262.596	292.112	278.366	260.741	286.33	288.93	302.98
264.4	273.367	266.202	253.676	290.003	261.469	275.806	290.192
280.604	271.042	294.497	265.141	303.071	258.227	262.586	299.58
302.95	303.663	266.6	309.271	279.278	274.986	285.703	291.562
258.342	314.052	268.482	248.837	292.586	307.915	279.861	266.786
280.801	274.368	283.386	254.504	279.358	268.578	280.835	273.317
270.202	269.055	318.518	276.802	278.58	281.993	269.932	285.038
283.218	279.991	280.819	278.202	282.207	273.573	298.119	255.784
281.507	245.915	270.031	292.441	250.304	250.949	274.56	286.596
294.932	262.327	291.772	274.503	299.514	252.978	267.566	292.185
285.984	308.258	282.503	273.25	257.217	300.831	251.228	274.48

5.) The Data Set lists the colors of M&Ms in a large bag of M&Ms. Construct a "Relative" Pie Chart and Dot Plot.
You may have to "code" the data.

M&Ms
Cracked
Red
Red
Cracked
Cracked
Orange
Orange
Red
Green
Red
Orange
Brown
Green
Yellow
Red
Green
Orange
Blue
Red
Yellow
Yellow
Green
Red
Blue
Red