Math 345 Elementary Statistics - Crawford

Books and notes (in any form) are not allowed. Show your set-up and work. Good Luck!

1. (3 pts) Answer the following questions about types of data and sampling.

(a). Determine whether the data described below is from a *discrete* or *continuous* data set.

A device is used to record the number of texts a driver reads while driving.

(b). Determine whether the type of sampling used below is random, systematic, convenience, stratified, or cluster.

A landscaper is testing the soil in a large lawn for fungal growth by taking samples every four feet on a square grid.

2. (6 pts) The data below gives the cost in dollars for a marriage proposal package at 25 different Major League Baseball stadiums. (Five stadiums don't allow proposals.)

39	50	50	50	55	55	75	85	100	115	175	175	200
209	250	250	350	400	450	500	500	500	500	1500	2500	

(a). Find each of the following. [You may use the STAT/LIST features of your calculator, when possible.]

mean median	mode	midrange
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(b). Do any of the data values seem like outliers? If so, which one(s)?

3. (6 pts) The following data gives the IQ Scores for 30 randomly selected people.

51	64	72	72	78	80	81	85	86	90	91	91	91	98	100
102	104	106	106	106	106	108	109	111	115	115	116	125	128	139

(a). Use a class width of 20 and a starting score of 50 to

(i) Construct a frequency distribution

(ii) Construct a relative frequency distribution.

(b). If you wanted 6 classes, determine the class width. [Do not construct the frequency distribution.]