

## Chapter 1 Problems

## Dr. Guffey's modified problem set

- 1 The following are the heights of all 5 starters on the WVU basketball team:

Values:      78.0      74.5      80.5      75.5      82.5

a) What is the median height of the 5 starters?

b) What is the average for the above heights?

c) What is the variance for the above heights?

d) What is the standard deviation for the above heights?

- 2 The following experimental measurements were recorded when sampling for the drying time, in hours, of a certain brand of latex paint:

Values:      3.4      2.5      4.8      4.4  
                 2.8      3.3      5.6  
                 4.4      4.0      5.2

a) What is the median for the above sample?

b) What is the average for the above sample?

c) What is the variance for the above sample?

d) What is the stand deviation for the above sample?

- 3 We hypothesize that aged polymer is weaker in tensile strength than newly created polymer. Fill in the table below.

	Data from Experiments					N <sub>samples</sub>	Mean	StdDev
No ageing:	227	212	200	218	216			
ageing:	219	214	215	222				

- 4 Compare the IQ means and standard deviations of John's 4 children to Fred's 3 children. Fill in the table below.

	IQs for all children					N <sub>samples</sub>	Mean	StdDev
John's	110	115	103	118				
Fred's	108	105	118	103	122			

- 5 Indicate whether each set of data is continuous or discrete:

	<u>Continuous</u>	<u>Discrete</u>
Heights of men		
Human blood volumes		
Number of marriages for 50-yr old men		
Starting salaries for engineering grads		
Number of rotten eggs in a carton of 12		
Number of grains of sand in a cup		