ENS 495 Fall 2017

Problem Set: Chapter 3		
Name:		

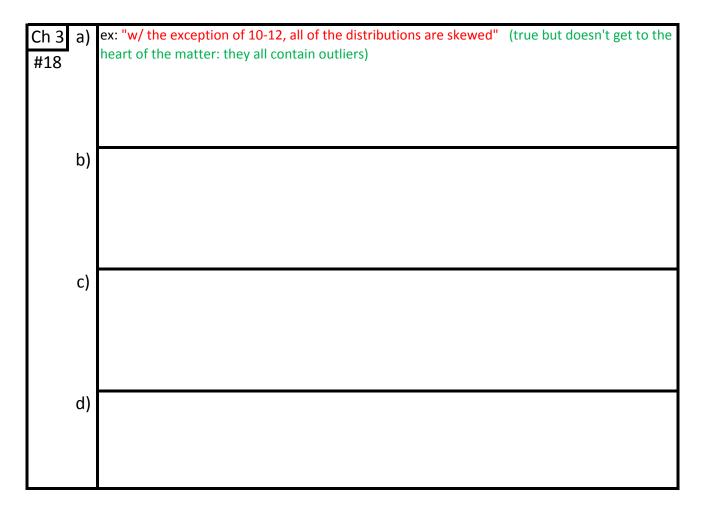
Discussion among students is encouraged but all answers must be written in your own words. Points will be deducted if you answers are identical to other students.

Ch 3: Describing Data

Ch 3	a)	mean / median? (circle answer)	
17		Why: Ex: "b/c the data includes an outlier, the mean will be biased, unlike the median"	
		"the median is resistant to outliers"	
	b)	Standard deviation (sd) / interquartile range (circle answer)	
		Why:	
		"interquartile range is resistent to outliers"	

Answer this question using R. Attach the R code used to make the calcualtions

Ch 3	_	Attach a graph of the data produced in R. Once you have the data organized you should be able to do this with a single plotting command. (Hint: this plot does not have means plotted on it).
#14 pg 89		Explain choice of graph: I didn't grade this part of the question A boxplot is best b/c the V1a-enhanced data is somewhat skewed. A plot of the mean w/ the standard error would also be fine.
	b	Contrl mean:58.05 V1a-enhanced mean: _86.27
	С	Contrl SD29.75 V1a-enhanced SD12.92



Answer this question using R. Attach the R code used to make the calculations

Ch 3	а	mean =	<u>0.9709</u>
21	b	median =	<u>1.01</u>
		1 3.1 1 3.1 1 3 4 1 3.1 7	0.004889091
91)	d	stand. dev (SD) =	0.06992203

Name: _____

Answer this question using R. Attach the R code used to make the calculations

Ch 3	а	Plot the data with a method other than a boxplot. Attach the plot	
#28		Is there an association: <u>Yes</u> / No	
(pg	b	Best way to compare data: mean / median	
93)		Values: AA = 0.7950 BB = 0.37	
	С	Best way to compare spread: standard deviation / interquartile range	
		Value: AA = 0.155 BB = 0.18	
		(you can get the interquaritle range using the summary() command, returns the median	
		and the quartiles)	