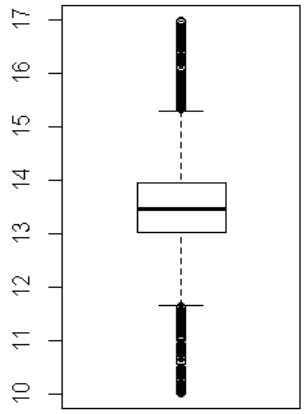
ENS 495 Fall 2016

Problem set: Chapters 2

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.

Chapter 2: Displaying Data

Ch 2	a)	**What is the mode?: About 12**
#20	b)	**about 50%**
	d)	**Name of frequency distribution: biomodal**
	new	**Estimate the median: about 12**
	new	**Describe how you estimated the median: You find the value that is in the exact middle. The median in this case is probably similar to the mode, but it doesn't have to be.**
	new	**Is the data shown in the boxplot to the right likely represent this data? Why or why not? NO The histogram in the book is skewed, while this boxplot indicates a symmetrical distribution. The median of the boxplot is in the middle, while the median of the histogram in the book is off to one side** 

Ch 2	a)	**Principal 1:** represent magnitude accurately (skinny cones make determining height hard; the fact that the width varies implies that width means something, but it doesn't)
#30		**Principal 2:** make patterns in the data easy to see (hard to interpret y-axis b/c it is 3D and has depth; cones are separate from each other making it hard to compare; also purple background behind purple bars could cause problems)
	b)	1) y axis not labeled; no units
		2) x axis not labeled

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c)	Redraw the graph by hand; doesn't have to be too pretty **barplot** would be the best way to present the data

Ch 2	a	boxplot
#34	b	**a** / b / c / **d** / **e**
	c	a / **b / c** / d / e
	d	a / **b / c** / d / e
	e	a / b / c / **d** / e
	f	a / b / c / d / **e**
	g	a / b / **c** / d / e

Its b or c - I always forget which one is which is which (pos vs. neg). What's important is to know what skew is.

Ch 2	a)	**boxplot**
#36	b)	Association: **Yes** / No Explain: swearing increases latency; latency ~ swearing; swearing is associated with latency b/c latency increaes while swearing; the median depends on ifyou are swearing
	c)	smallest and largest "non-extreme" value; represent the range if there are no outliers
	d)	1) histogram 2) stripchart / dot plot / bargraph; NOT line graph, pie graph, scatterplot, cummulative dist.

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Chapter 2: Displaying Data

Ch 2

a)

b)

#20 d)

new

new

new

Ch 2

a)

#30

b)

Name: _____

c)

Ch 2	a
#34	b
	c
	d
	e
	f
	g

Ch 2	a)
#36	b)
	c)
	d)

Some students interpreted "associated" as referring to "as non-swearing and swearing similar" That is, comparing nonswearing to