KEY

Prep for Quiz 3

Always show enough of your set up and work to indicate how you arrived at your answer. If it is not clear how you got your answer, you may not get full credit for the problem.

I. A pollster want to get the opinions of Solano Community College students on several topics that affect all students. Identify the type of bias described.

A. selection (sampling) B. voluntary response C. non-response D. leading question
E. social acceptability

C 1. A questionnaire is mailed to a simple random sample of 500 SCC students and 227 are returned and used for the study.

A 2. A sample of 437 SCC students is obtained by using all students enrolled in statistics classes this semester.

D 3. One of the questions asked on the questionnaire is "Do you think that smokers should be allowed to smoke on campus endangering the health and comfort of other students?"

E 4. A CHP officer interviews a sample of students and asks if they have driven drunk in the past year.

II. Given a set of data.

1. What is the goal when analyzing this data? to reveal the distribution

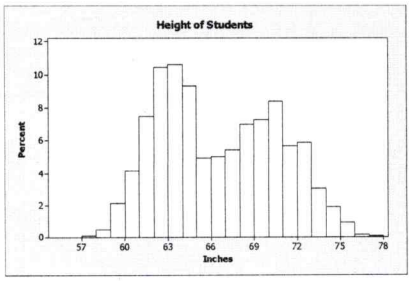
2. I mentioned two broad ways of achieving this goal, they are

   a. to ~~show~~ organize the data in charts, graphs etc. or

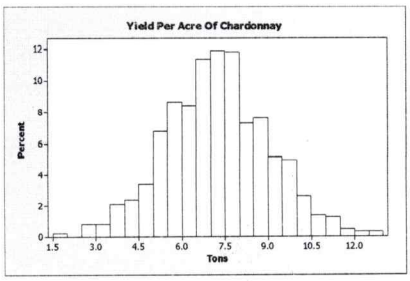
   b. to summarize the data by computing measures such as the mean and standard deviation.

III. Match each of the following histograms with the description of shape that best fits it.

a. bell shaped b. uniform c. unimodal, skewed to the right
d. unimodal, skewed to the left e. bimodal



1. e



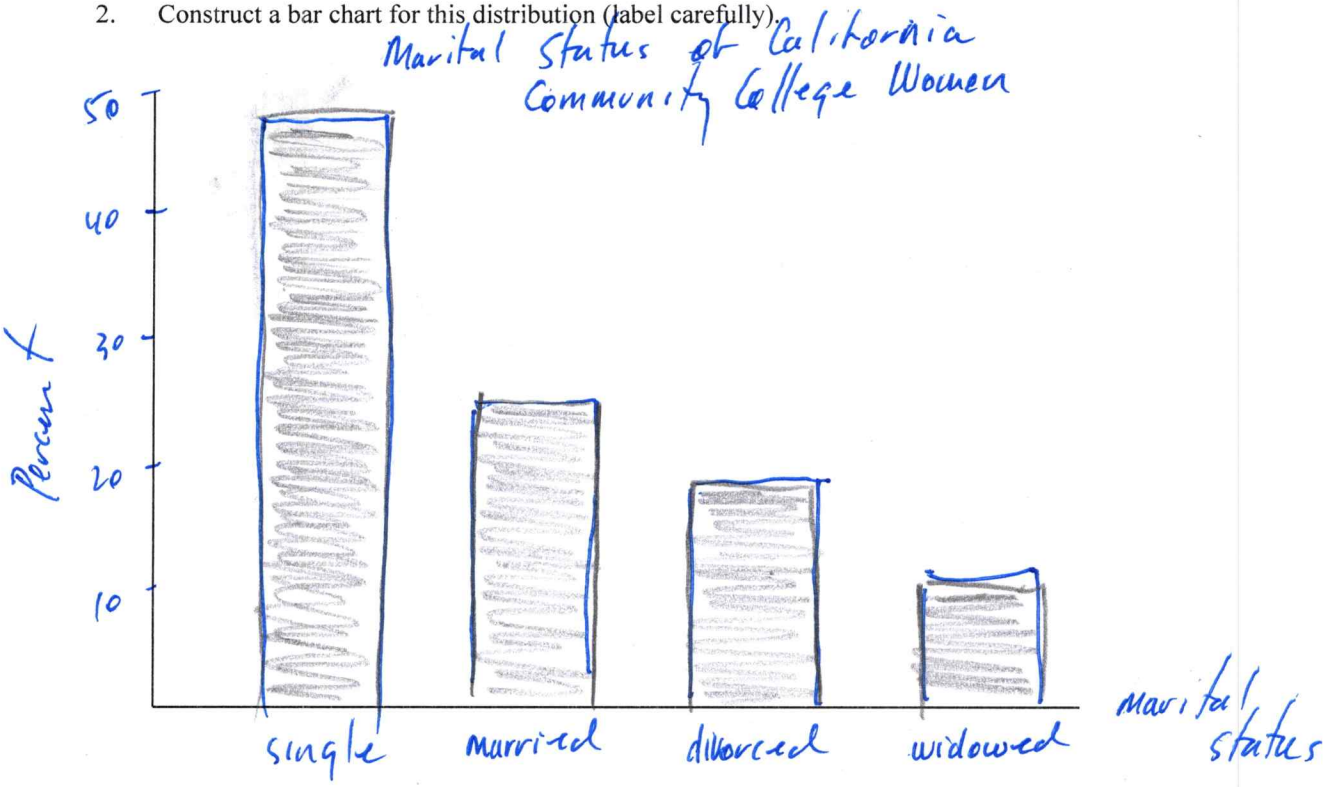
2. a

Name KEY

IV. The table is for sample of California Community College female students.

Marital Status	Frequency	Percent
Single	240	48
Married	120	24
Divorced	90	18
Widowed	50	10
Total	500	100%

1. Fill in the column for the percentages (relative frequencies).
2. Construct a bar chart for this distribution (label carefully).



V. Given the following frequency distribution for the amount time (in minutes) it took 6th grade students to complete an assignment.

Time	Count	Percent (relative freq.)	Cumulative Frequency
21 – 23	3	6	3
24 – 26	5	10	8
27 – 29	10	20	18
30 – 32	24	48	42
33 – 35	8	16	50
	50		

1. Fill in the column for the percentages (relative frequencies).
2. Fill in the column for the cumulative frequencies.
3. Find the class width. 3
4. When constructing a histogram give a good label for the horizontal axis? time (minutes)

5. On separate paper construct the histogram.

Your histogram should look something like the Minitab histogram below.