qz03_s20.doc
31-Jan-20

Name KEY

Row # (from the door) 0 Seat # (from the front) 0

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. Note that there are two bonus points available.

(2) **I. A pollster for the Republican National Committee uses a telephone survey to obtain the opinion of registered Republicans on the 2020 Presidential election. Identify the type of bias described.**

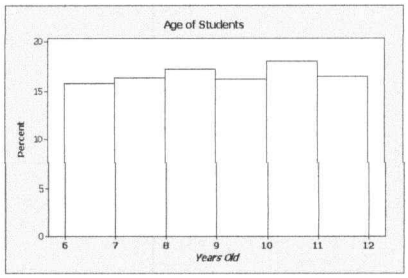
A. selection (sampling) B. voluntary response C. non-response D. leading question
E. social acceptability

A 1. The sample is obtained calling 2400 registered Republican who donated to Donald Trump's 2016 election campaign.

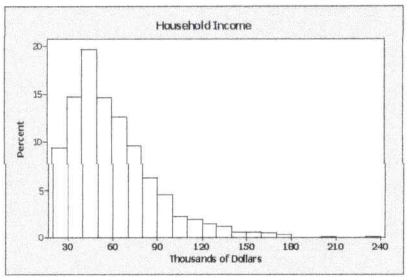
D 2. One of the questions asked is "Who do you trust more to protect America from foreign and domestic threats: President Trump or a corrupt Democrat?"

(4) **II. Match each of the following histograms with the description of shape that best fits it.**

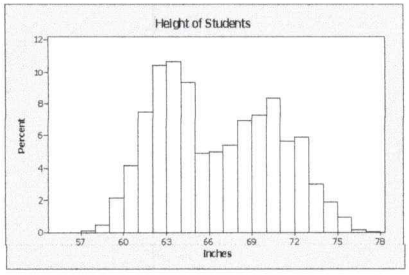
a. bell shaped b. uniform c. unimodal, skewed to the right
d. unimodal, skewed to the left e. bimodal



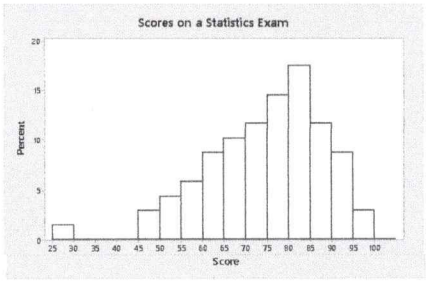
1. b



2. c



3. e



4. d

a. was a common answer but to be bell-shaped it would be symmetric - this is clearly not sym. on both sides of the 80-85 rect.

KEY

(6) **III. The table is for a sample of UC Davis undergraduate student who commute to the campus from outside of the city of Davis.**

-1 for decimal fractions e.g. .2 etc

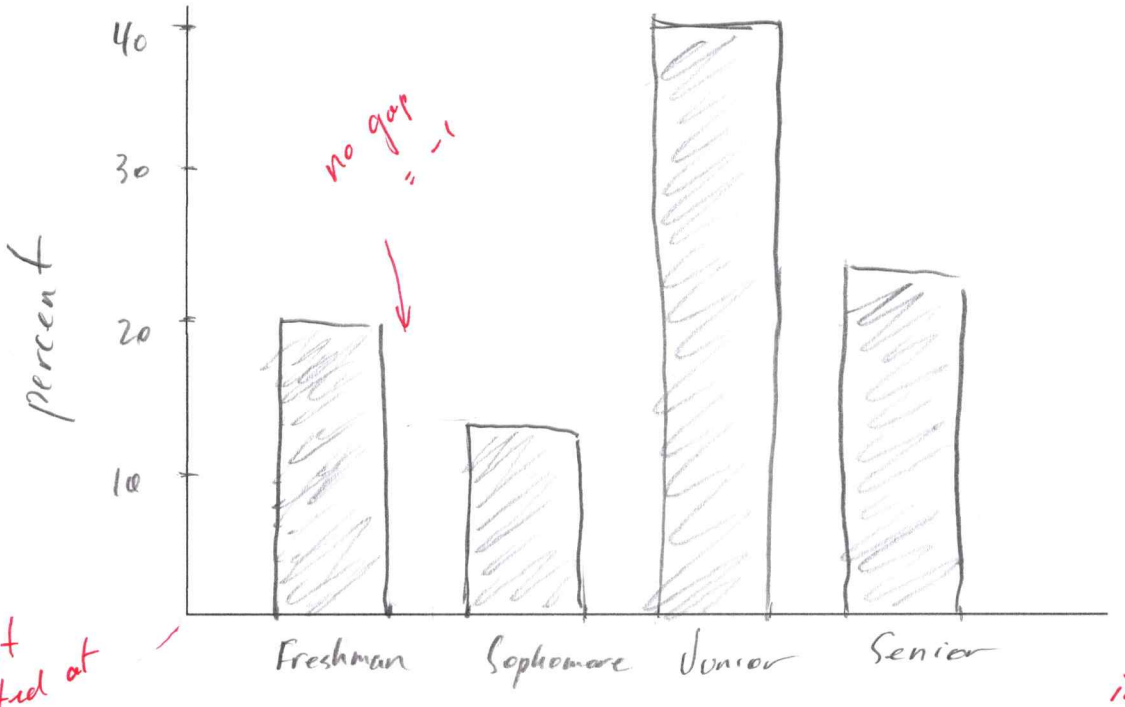
Class	Frequency	Percent
Freshmen	40	20
Sophomore	30	15
Junior	80	40
Senior	50	25
Total	200	

note percent $= \frac{40}{200} \cdot 100 = \frac{40}{2} = 20$

So divide frequency by 2 to get percent

(2) 1. Fill in the column for the percentages (relative frequencies).

(4) 2. Construct a bar chart for this distribution (label carefully).



note: graphs should be self-explanatory, stand-alone

KEY

(10) IV. Given the following frequency distribution for the yield in tons per acre of Zinfandel grapes grown in 25 vineyards planted before 1940.

-1 for decimal -1 for cum %

Yield	Count	Percent (relative freq.)	Cumulative Frequency
1.2 – 1.7	1	4	1
1.8 – 2.3	5	20	6
2.4 – 2.9	6	24	12
3.0 – 3.5	9	36	21
3.6 – 4.1	4	16	25
	25		

(2) 1. Fill in the column for the percentages (relative frequencies).

(2) 2. Fill in the column for the cumulative frequencies.

(2) 3. Find the class width. 0.6 tons

(4) 4. Construct the histogram. (label carefully) — axes w/ scale, title