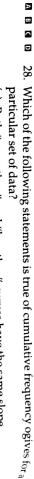
Chapter Concepts Test

Circle the correct answer or fill in the blank. Answers are in the back of the book.

it more clearly snows each separate class in the subtribution.	
1/.	
15.	
15.	
14.	
13.	
12:	
11.	=
10.	=
9.	
%	
7.	
the same proportions as they are included in that popularious in the same proportions as they are included in that popularious in the same proportions as they are included in that popularious in the same proportions as they are included in that popularious.	=
known as a tabular. 5. The classes in any relative frequency distribution are both and included in the classes in any relative frequency distribution are both and are both are both and a	8
4. A single observation is called a data point, which is all inclusive and	
	5
2. A ki-to-rem is a spring of rootangles, each proportional in width to the number	
1. In comparison to a data array, the frequency distribution is a right	8
as the advantage	
Circle the correct answer or fill in the blank. Answers are	

- 18. A baseball player's batting average is computed using a sample.
- 19. A frequency distribution organizes data into groups of values describing one or more characteristics of the data.
- 0 0 20. A series of rectangles, each proportional in width to the range of values within a class and proportional in height to the number of items falling in the class, is called a frequency polygon.
- ПП 21. The class widths of a frequency distribution are of equal size.
- ABGD 22. Which of the following represents the most accurate scheme of classifying data?
 - (a) Quantitative methods.
 - (b) Qualitative methods.
 - (c) A combination of quantitative and qualitative methods.
 - (d) A scheme can be determined only with specific information about the situation.
- ABGD 23. Which of the following is NOT an example of compressed data?
 - (a) Frequency distribution.
 - (b) Data array.
 - (c) Histogram.
 - (d) Ogive.
- 24. Which of the following statements about histogram rectangles is correct? ABGDE
 - (a) The rectangles are proportional in height to the number of items falling in the classes.
 - (b) There are generally five rectangles in every histogram.
 - (c) The area in a rectangle depends only on the number of items in the class as compared to the number of items in all other classes.
 - (d) All of these.
 - (e) (a) and (c) but not (b).
- 25. Why is it true that classes in frequency distributions are all-inclusive? ABGDE
 - (a) No data point falls into more than one class.
 - (b) There are always more classes than data points.
 - (c) All data fit into one class or another.
 - (d) All of these.
 - (e) (a) and (c) but not (b).
 - 26. When constructing a frequency distribution, the first step is A B C D
 - (a) Divide the data into at least five classes.
 - (b) Sort the data points into classes and count the number of points in each class.
 - (c) Decide on the type and number of classes for dividing the data.
 - (d) None of these.
 - 27. As the numbers of observations and classes increase, the shape of a frequency A B G D polygon
 - (a) Tends to become increasingly smooth.
 - (b) Tends to become jagged.
 - (c) Stays the same.
 - (d) Varies only if data become more reliable.



- (a) Both "more-than" and "less-than" curves have the same slope.
- (b) "More-than" curves slope up and to the right.
- (c) "Less-than" curves slope down and to the right.
- (d) "Less-than" curves slope up and to the right.
- From an ogive constructed for a particular set of data

lacksquare

⋴

- (a) The original data can always be reconstructed exactly.
- (b) The original data can always be approximated
- (c) The original data can never be approximated or reconstructed, but valid conclusions regarding the data can be drawn.
- (d) None of these.
- (e) (a) and (b) but not (c).
- In constructing a frequency distribution for a sample, the number of classes $\ensuremath{\mathtt{d}}_e$ pends on
- (a) The number of data points.
- (b) The range of the data collected
- (c) The size of the population
- (d) All of these.
- (e) (a) and (b) but not (c).
- \cap <u>.</u> 31. Which of the following statements is true?
- (a) The size of a sample can never be as large as the size of the population from which it is taken.
- (b) Classes describe only one characteristic of the data being organized.
- (c) As a rule statisticians generally use between 6 and 15 classes.
- (d) All of these.
- (e) (b) and (c) but not (a).
- As a general rule, statisticians tend to use which of the following number of classes when arranging data?
- (a) Fewer than five.
- (b) Between one and five.
- (c) More than 30.
- (d) Between 20 and 25.
- (e) None of these.
- ⊡ Which of these is NOT a test for usability of data?
- (a) Source.

Þ

- (b) Contradiction of other evidence.
- (c) Missing evidence.
- (d) Number of observations.
- (e) None of these.
- Ω o 34. A relative frequency distribution presents frequencies in terms of
- (a) Fractions.

Þ

- (b) Whole numbers.
- (c) Percentages.
- (d) All of the above
- (e) Both (a) and (c).

	35. Graphs of frequency distributions are used because (a) They have a long history in practical applications.
	(b) They attract attention to data patterns.
	(c) They account for biased or incomplete data.
	(d) They allow for easy estimates of values.
	(e) Both (b) and (d).
	36. Continuous data are differentiated from discrete data in that
	(a) Discrete data classes are represented by fractions.
	(b) Continuous data classes may be represented by fractions.
	(c) Continuous data take on only whole numbers.
	(d) Discrete data can take on any real number.
	37. Double counting is a result of or
	data.
	38. It is found that 50 of 1,000 customers in a survey contain the relevant
	characteristics of all customers in the survey. The 50 customers are a
	sample.
	39. The and the are two
	methods of data arrangement.
	40. A is a collection of all the elements in a group. A
	collection of some, but not all, of these elements is a
	41. Dividing data points into similar classes and counting the number of obser-
	vations in each class will give a distribution.
	42. If data can take on only a limited number of values, the classes of these
	data are called Otherwise, the classes are called
	·
	43. A relative frequency distribution presents frequencies in terms of
	or
	44. A graph of a cumulative frequency distribution is called a
	0 1
	45. If a collection of data is called a data set, a single observation would
	be called a