

- 1) Determine which of the following describes quantitative data. 1) \_\_\_\_\_  
i). the name of a chemical sample  
ii). the mass of a chemical sample  
iii). the color of a chemical sample  
A) ii only                      B) i only                      C) i and ii only                      D) i, ii, and iii
- 2) The amount of time needed to run the Boston marathon is an example of which type of variable? 2) \_\_\_\_\_  
A) temporal                      B) qualitative                      C) discrete                      D) continuous
- 3) Determine which of the following describes qualitative data. 3) \_\_\_\_\_  
i). the volume of a shipping container, in gallons  
ii). the name of the material from which the container is made  
iii). the shape of the container  
A) i and iii only                      B) i, ii, and iii                      C) i and ii only                      D) ii and iii only
- 4) Determine which of the following describes qualitative data. 4) \_\_\_\_\_  
i). the make of the car with license plate number VNS-862  
ii). the license plate number VNS-862  
iii). the number of vehicles whose license plate number begins with "VNS"  
A) i only                                      B) neither i, nor ii, nor iii  
C) i and ii only                                      D) iii only
- 5) Which one of the following data are discrete? 5) \_\_\_\_\_  
A) the latitude and longitude of a boat at sea  
B) the latitude and longitude of the boat's port of departure  
C) the speed of the boat's propeller, in revolutions per minute  
D) the number of crew members on the boat
- 6) Which one of the following data are continuous? 6) \_\_\_\_\_  
A) the rankings of the trees, from most numerous to least numerous  
B) the number of representatives of each species in the park  
C) the number of species of trees in a park  
D) the average height of a sample of trees
- 7) When rolling two six-sided dice, your total roll ranges from 2 (double ones) to 12 (double sixes). Characterize the nature of the roll total. 7) \_\_\_\_\_  
A) qualitative and continuous                      B) qualitative and discrete  
C) quantitative and continuous                      D) quantitative and discrete

- 8) For the class 6-17, the class boundaries are \_\_\_\_\_.
- A) 5.5 and 17.5      B) 6 and 17      C) 6.5 and 16.5      D) 5 and 18      8) \_\_\_\_\_
- 9) What is the midpoint of the class 7-11?
- A) 5      B) 9      C) 4      D) 9.5      9) \_\_\_\_\_
- 10) A recent statistics exam yielded the following 25 scores. Construct a grouped frequency distribution with the class limits shown below.      10) \_\_\_\_\_

67 89 75 54 64  
 53 83 69 68 92  
 87 84 43 80 88  
 76 83 76 98 55  
 73 80 41 85 95

Class Limits	Frequency
41-50	
51-60	
61-70	
71-80	
81-90	
91-100	

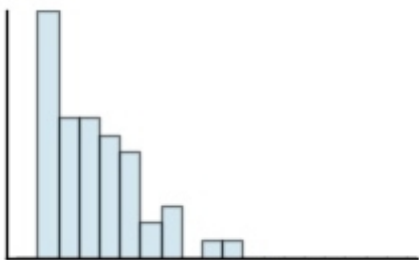
A)		B)	
Class Limits	Frequency	Class Limits	Frequency
41-50	2	41-50	3
51-60	3	51-60	2
61-70	4	61-70	4
71-80	6	71-80	7
81-90	7	81-90	6
91-100	3	91-100	3

- 11) State the reason why the following frequency distribution is incorrectly constructed.      11) \_\_\_\_\_

<u>Class</u>	<u>Frequency</u>
48-53	2
54-59	0
60-65	6
66-72	4
73-78	3

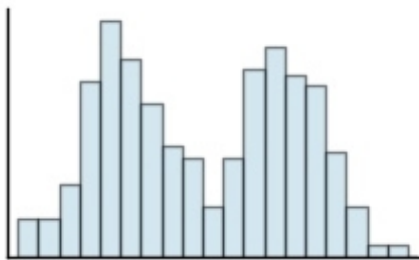
- A) there is no percent column      B) a class has been omitted  
 C) class limits overlap      D) class width is not uniform

12) Classify the histogram as skewed to the left, skewed to the right, or approximately symmetric. 12) \_\_\_\_\_



- A) approximately symmetric
- B) skewed to the right
- C) skewed to the left

13) Classify the histogram as unimodal or bimodal. 13) \_\_\_\_\_



- A) unimodal
- B) bimodal

14) The scores on a recent statistics exam are shown below. Construct a stem and leaf plot for the data. 14) \_\_\_\_\_

98, 73, 64, 69, 86, 89, 77, 86, 91, 73, 88

A)

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6 | 4 9
7 | 3 3 7
8 | 6 6 8 9
9 | 1 8
    
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B)

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6 | 4 9
7 | 3 7 3
8 | 6 9 6
9 | 8 1
    
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15) What is the mean of the following data set? 15) \_\_\_\_\_  
5, 9, 12, 13, 14

- A) 8.0
- B) 12.0
- C) 10.6
- D) 15.4

16) What is the median of the following set of values? 16) \_\_\_\_\_  
7, 21, 19, 15, 19, 14, 15, 19

- A) 15
- B) 19
- C) 17
- D) 13

- 17) Find the median for the following data set: 17) \_\_\_\_\_  
 21    23    10    19    13  
 A) 19                                  B) 17.2                                  C) 13                                  D) 4.9
- 18) Find the mode for the following data set: 18) \_\_\_\_\_  
 22    32    14    34    26    22  
 A) 24                                  B) 20                                  C) 22                                  D) 25.0
- 19) What is the midrange of the following data set? 19) \_\_\_\_\_  
 7, 13, 12, 14, 6, 14, 20, 20, 20  
 A) 7                                  B) 13                                  C) 14                                  D) 20
- 20) The data show the heights in feet of 14 roller coasters. Find the mean, median, midrange, and mode for the data. 20) \_\_\_\_\_  
 95    110    59    133    100    119    154  
 100    114    91    154    95    59    84  
  
 A) mean = 104.8                                  B) mean = 100  
    median = 100                                      median = 104.8  
    midrange = 106.5                                      midrange = 106.5  
    mode = 59, 95, 100, and 154                                      mode = 102
- 21) The grades for the trigonometry exam are listed below. Find the range. 21) \_\_\_\_\_  
 85, 76, 93, 82, 84, 90, 75  
 A) 18                                  B) 9                                  C) 11                                  D) 76
- 22) Find the sample standard deviation for the following data set: 22) \_\_\_\_\_  
 28    12    30    16    22  
  
 A) 7.7                                  B) 6.9                                  C) 58.8                                  D) 47.0
- 23) A population has a mean  $\mu = 53$  and standard deviation  $\sigma = 14$ . Find the  $z$ -score for a population value of 29. 23) \_\_\_\_\_  
 A) -24                                  B) -1.7                                  C) -0.6                                  D) 2.1
- 24) The number of incidents in which police were needed for a sample of 9 schools in Allegheny County is 8, 39, 6, 12, 45, 16, 3, 0, 15. Find  $Q_1$  or lower quartile and  $Q_3$  or upper quartile for the data. 24) \_\_\_\_\_  
 A)  $Q_1 = 4.5$ ;  $Q_3 = 27.5$                                   B)  $Q_1 = 6$ ;  $Q_3 = 16$

## Answer Key

Testname: REVIEW\_01

- 1) A
- 2) D
- 3) D
- 4) C
- 5) D
- 6) D
- 7) D
- 8) A
- 9) B
- 10) A
- 11) D
- 12) B
- 13) B
- 14) A
- 15) C
- 16) C
- 17) A
- 18) C
- 19) B
- 20) A
- 21) A
- 22) A
- 23) B
- 24) A