

## AS2(Assignment 2, Unit 1): Data Organization

Please highlight the correct answer choice like this: **a**

1. A sample of  $n = 40$  scores ranges from a high of  $X = 11$  to a low of  $X = 5$ . If these scores are placed in a frequency distribution table, how many  $X$  values will be listed in the first column?

- a. 6
- b. **7**
- c. 9
- d. 20

2. For the following frequency distribution, how many individual scores are in the entire set?

	<u>X</u>	<u>f</u>
a. $N = 54$	5	2
b. $N = 12$	4	6
c. $N = 14$	3	1
d. impossible to determine	2	3

3 For the following frequency distribution, how many individuals had a score of  $X = 5$ ?

	<u>X</u>	<u>f</u>
a. 1	5	2
b. <b>2</b>	4	4
c. 3	3	1
d. 4	2	3

4 For the following frequency distribution, what is the value of  $\Sigma X$ ?

	<u>X</u>	<u>f</u>
a. <b>10</b>	5	2
b. 14	4	4
c. 25	3	1
d. 35	2	3

5. For the following frequency distribution of quiz scores, how many individuals took the quiz?

	<u>X</u>	<u>f</u>
a. $n = 5$	5	6
b. <b><math>n = 15</math></b>	4	5
c. $n = 21$	3	5
d. cannot be determined	2	3
	1	2

6. For the following distribution of quiz scores, if a score of  $X = 3$  or higher is needed for a passing grade, how many individuals passed?

	<u>X</u>	<u>f</u>
a. 3	5	6
<b>b. 11</b>	4	5
c. 16	3	5
d. cannot be determined	2	3
	1	2

7. What frequency distribution graph is appropriate for scores measured on a nominal scale?

- a. only a histogram
- b. only a polygon
- c. either a histogram or a polygon
- d. only a bar graph**

8. What kind of frequency distribution graph is appropriate for scores measured on an interval or ratio scale?

- a. only a histogram**
- b. only a polygon
- c. either a histogram or a polygon
- d. only a bar graph

9. A mechanic recorded the type of vehicle for each vehicle in his car sale lot. If the data are presented in a frequency distribution graph, what type of graph should be used?

- a. bar graph
- b. a histogram
- c. a polygon
- d. either a histogram or a polygon**

10. A researcher records the number of intersections in each city in Michigan. If the results are presented in a frequency distribution graph, what kind of graph should be used?

- a. a bar graph
- b. a histogram
- c. a polygon**
- d. either a histogram or a polygon

11. A soccer coach recorded the time each player took to shoot a penalty kick. If the data are presented in a frequency distribution graph, what type of graph should be used?

- a. bar graph**
- b. a histogram
- c. a polygon
- d. either a histogram or a polygon

12. What kind of frequency distribution graph shows the frequencies as bars that are separated by spaces?

- a. bar graph
- b. a histogram
- c. a polygon
- d. all the above

13. What kind of frequency distribution graph shows the frequencies as bars, with no space between adjacent bars?

- a. bar graph
- b. a histogram
- c. a polygon
- d. all the above

14. Find each value requested for the set of scores in the following frequency distribution table.

<u>X</u>	<u>f</u>
5	1
4	2
3	3
2	5
1	5

n = 16                       $\Sigma X =$  37                       $(\Sigma X)^2 =$   
1369

Are the data from a sample or population? Sample

15. On SPSS, please construct a frequency table and histogram for the following data:

8, 5, 6, 4, 8, 7, 2, 8, 5, 8, 9, 7, 7, 6, 6, 4, 3, 5, 8, 9, 7

and paste your SPSS results here:

16. On SPSS: Construct a frequency table and generate the appropriate graph for the following data which represent the number of times that participants blinked in one minute:

2, 3, 1, 4, 2, 5, 3, 3, 1, 2, 2, 4, 6, 5, 5, 4, 4, 4, 2, 6, 3, 7, 2, 4, 1, 2, 5, 3,4,4,5,4,5,3,2,1,2

Paste your SPSS results here: **I apologize for leaving question 15 and 16 blank. I am having difficulty uploading the SPPS on to my computer.**

17. Provide the Statistical Notation for the following (you may have to use the insert symbol option on your word menu):

Mean of a population	<u>          <math>\mu</math>          </u>
Mean of a sample	<u>          <math>M</math>          </u>
Number of scores in a population	<u>          <math>N</math>          </u>
Number of scores in a sample	<u>          <math>n</math>          </u>
A raw score	<u>          <math>X</math>          </u>
Sum	<u>          <math>E</math>          </u>
Sum the scores	<u>          <math>\Sigma X</math>          </u>
Sum the scores and square them	<u>          <math>(\Sigma X)^2</math>          </u>
Square each score and then add up the squared scores	<u>          <math>\Sigma X^2</math>          </u>

18. What is the *purpose* of a frequency distribution table?

The purpose of the frequency table is to organize the data.

19. Is a frequency table a descriptive or inferential method? \_\_\_\_\_ It a descriptive table

20. The following frequency distribution is from an Introduction to Psychology class quiz. Based on the data, please answer the questions below:

<u>X</u>	<u>f</u>
8	2
7	3
6	0
5	4
4	1
3	5

What is the range of data? 5

How many students took the quiz? 15

How many students received a score of 5? 4

How many students received a score of 8? 2

How many students got a score higher than 6? 5

How many students got a score lower than 5? 6

N = 15

$\Sigma X =$  76