

## 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. 2	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. 10	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. $n = 15$	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. 11	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?

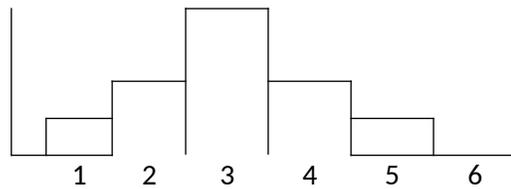
- a. bar graph
- b. a histogram
- c. a polygon
- d. all of the above

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

- a. bar graph
- 4 b. a histogram
- 3 c. a polygon
- 2 d. all of the above

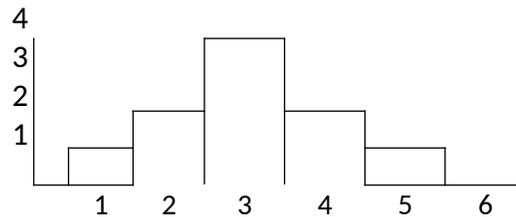
14. The following graph is an example of a \_\_\_\_\_

- a. bar graph
- b. histogram
- c. polygon
- d. none of the others



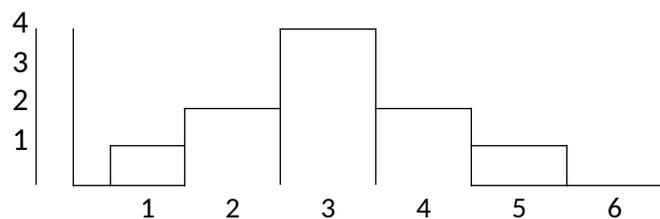
15. For the distribution in the following graphs, how many individuals had a score of  $X=3$ ?

- a. 1
- b. 2
- c. 3



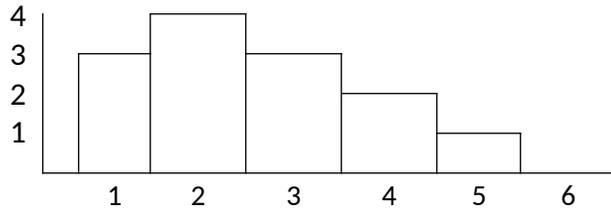
16. For the distribution in the following graph, what is the value of  $\Sigma X$ ?

- a. 15
- b. 21
- c. 30
- d. cannot determine



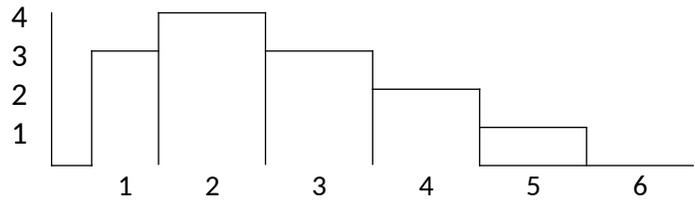
17. How many individual scores are in the distribution shown in the following graph?

- a.  $n = 5$
- b.  $n = 6$
- c.  $n = 13$
- d. cannot determine



18. For the distribution in the following graph, the lowest score is  $X =$  \_\_\_\_\_ and the number of people with this score is \_\_\_\_\_.

- a. 1, 1
- b. 1, 3
- c. 5, 1
- d. 2, 4



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

$X$	$f$
5	1
4	2
3	3
2	5
1	5

$n =$  \_\_\_\_\_       $\Sigma X =$  \_\_\_\_\_       $(\Sigma X)^2 =$  \_\_\_\_\_

Are the data from a sample or population? \_\_\_\_\_

20. 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:

21. 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:

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

Mean of a population \_\_\_\_\_

Mean of a sample \_\_\_\_\_

Number of scores in a population \_\_\_\_\_

Number of scores in a sample \_\_\_\_\_

A raw score \_\_\_\_\_

Sum \_\_\_\_\_

Sum the scores \_\_\_\_\_

Sum the scores and square them \_\_\_\_\_

Square each score and then add up the squared scores \_\_\_\_\_

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

---

---

---

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

25. 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? \_\_\_\_\_

How many students took the quiz? \_\_\_\_\_

How many students received a score of 5? \_\_\_\_\_

How many students received a score of 8? \_\_\_\_\_

How many students got a score higher than 6? \_\_\_\_\_

How many students got a score lower than 5? \_\_\_\_\_

N = \_\_\_\_\_

$\Sigma X$  = \_\_\_\_\_