

## 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. 7

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

	<u>X</u>	<u>f</u>	
	5	2	
b. N = 12	4	6	
	3	2	3

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

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

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

	<u>X</u>	<u>f</u>
	5	2
	4	4
	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>
	5	6
	4	5
c. n = 21	3	5
	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>
	5	6
	4	5
c. 16	3	5
2		
3		
	1	2

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

d. only a bar graph

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

c. either a histogram or a polygon

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

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

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

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

a. bar graph

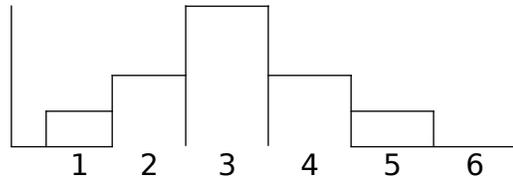
13. What kind of frequency distribution graph shows the frequencies as bars, with no space between adjacent bars?

4  
3  
2  
1

b. a histogram

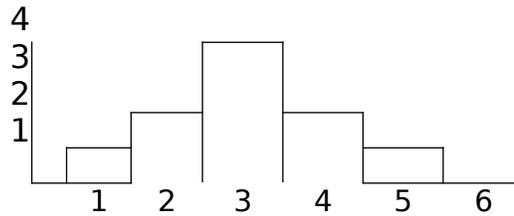
14. The following graph is an example of a \_\_\_\_\_

b. histogram



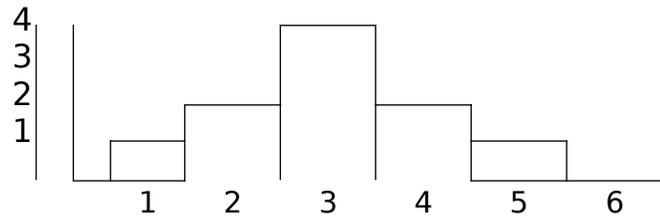
15. For the distribution in the following graphs, how many individuals had a score of  $X=3$ ?

c. 3



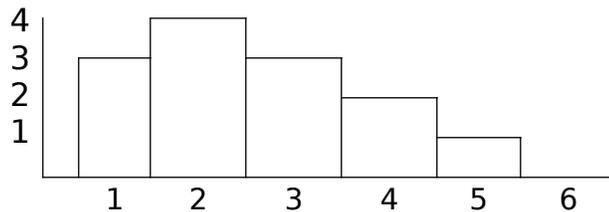
16. For the distribution in the following graph, what is the value of  $\Sigma X$ ?

b. 21



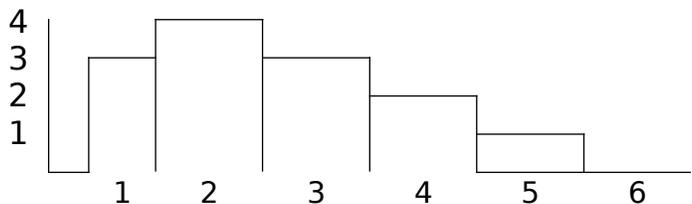
17. How many individual scores are in the distribution shown in the following graph?

b.  $n = 6$



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

c. 5, 1



19. 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 = 5                       $\Sigma X =$  37                       $(\Sigma X)^2 =$   
1369

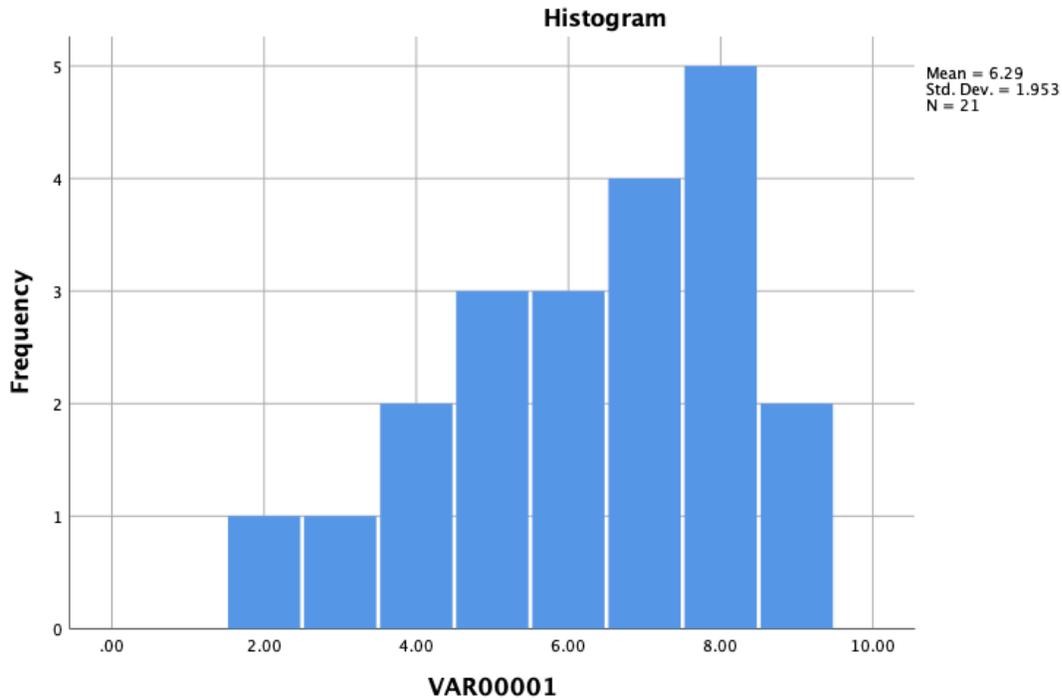
Are the data from a sample or population? sample

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:

<b>VAR00001</b>					
		Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	4.8	4.8	4.8
	3.00	1	4.8	4.8	9.5
	4.00	2	9.5	9.5	19.0
	5.00	3	14.3	14.3	33.3
	6.00	3	14.3	14.3	47.6
	7.00	4	19.0	19.0	66.7
	8.00	5	23.8	23.8	90.5
	9.00	2	9.5	9.5	100.0
	Total	21	100.0	100.0	



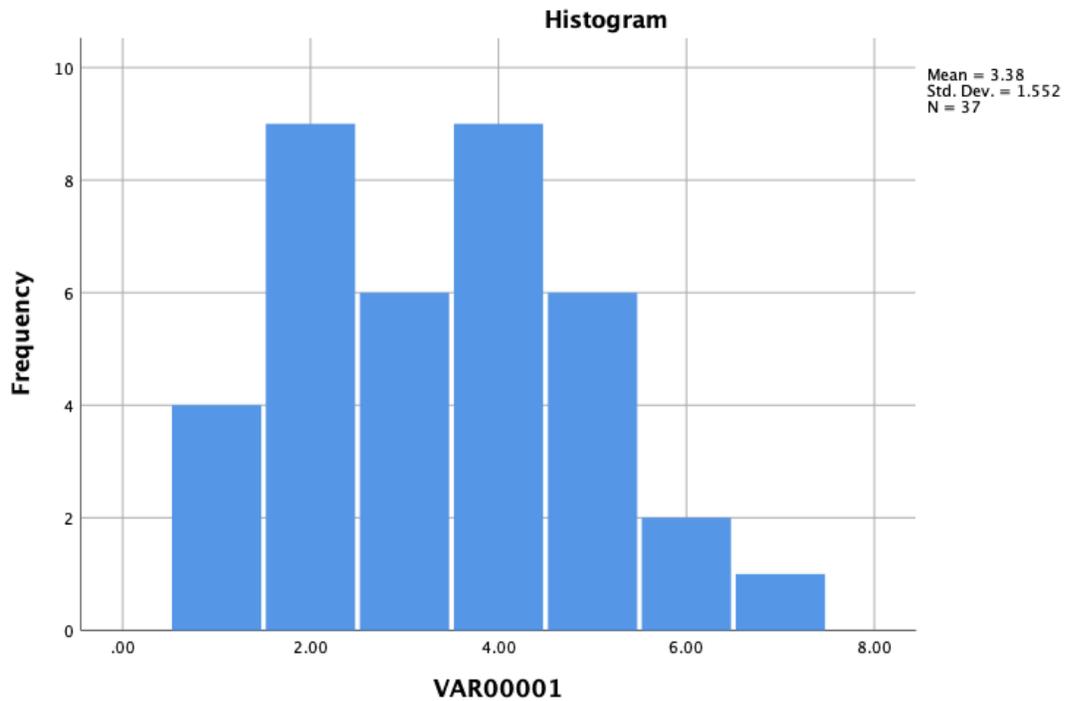
21. On SPSS: Construct a frequency table and generate the appropriate graph for the following data which represent the number of times that participants blinked in one minute:

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:

**VAR00001**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	10.8	10.8	10.8
	2.00	9	24.3	24.3	35.1
	3.00	6	16.2	16.2	51.4
	4.00	9	24.3	24.3	75.7
	5.00	6	16.2	16.2	91.9
	6.00	2	5.4	5.4	97.3
	7.00	1	2.7	2.7	100.0
	Total	37	100.0	100.0	



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           $\mu$            

Mean of a sample           $M$            

Number of scores in a population           $N$            

Number of scores in a sample           $n$            

A raw score           $X$            

Sum           $\Sigma$

Sum the scores  $\Sigma X$

Sum the scores and square them  $(\Sigma X)^2$

Square each score and then add up the squared scores  $\Sigma X^2$

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

to organize and describe the data not explain it

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

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? 3-8

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

$$N = \underline{\quad 6 \quad}$$

$$\Sigma X = \underline{\quad 76 \quad}$$