Republic of the Philippines
Department of Education
Region IV - A CALABARZON
City Schools Division Office of Antipolo
District I-C
DELA PAZ NATIONAL HIGH SCHOOL
Ninoy Aquino Avenue, Brgy. Dela Paz Antipolo City

POST TEST
Mathematics 7
Measure of Variability

Direction: Read each item carefully and write your answer on the space before each number.

1. Which of the following is difference between the highest and lowest score?
   A. Range B. median C. deviation D. standard deviation

2. What is the range of the following set of data? 1,4,8,7,9?
   A. 2 B. 6 C. 8 D. 10

3. Which of the following is the mean absolute deviation of the following data: 1.50, 2.75, 1.25, 1.25, 2.75?
   A.1.8 B. 1.9 C. 1.7 D. 1.6

4. The following data represent the hours worked over an eight-week period: 47, 50, 30,41, 44,45. What is the range of this set of data?
   A. 25 B. 24 C. 26 D. 20

5. The following are the scores you got in 5 quizzes: 5, 3, 10, 4, 8.What is the standard deviation?
   A. 2.71 B.3.41 C. 2.61 D. 3.61

6. Given the mean of 7, what is the standard deviation of the following data set: 7, 10, 4, 8, 6?
   A. 3 B. 4 C. 2 D. 5

7. Gasoline prices (per liter) for the last five days were ₱52, ₱50, ₱38, ₱49, and ₱48. What is the variance?
   A. 23.74 B. 23.84 C. 23.94 D. 23.64

8. The standard deviation of a set of data is zero if and only if the observations are of equal values.
   A. True B. False C. Maybe D. None

9. Given is the record of the number of buses that were late to arrive in a bus terminal.
   0,7,0,0,2,5,0,0,6,0,1,25,0,10,1,1,22
   Rey said that the number that best represents the data is 5. Tina argued and said that 1 is the best representation of the data. Vince disagreed and insisted that 0 is the most appropriate number to represent the data. Who is correct? Explain.

   A. Rey. He is using the mean 5 and the mean is always the best measure to represent any set of data.
   B. Tina. The best measure to represent the given data is the median 1 because there are extreme values in the data set.
   C. Vince. 0 is the mode and it is the most appropriate measure to use in this kind of data.
   D. All of them. Any measure of central tendency is appropriate to use in describing the data.

10. The smaller the standard deviation, the _____ the values.
    A. less scattered C. equal scattered
    B. more scattered D. less or more scattered

11. What is the variance of the data 11, 7, 9, 8, 10.
    A. 3 B. 4 C. 2 D. 1

LIVEWORKSHEETS

12. Among the measures of variability, which is the most reliable?
A. average deviation
B. range
C. standard deviation
D. variance

For item nos. **13-17**, refer to the following data.

Class	Frequency
46-50	1
41-45	2
36-40	3
31-35	10
26-30	6
21-25	9
16-20	5
11-15	6
6-10	4
1-5	2

13. What is the class mark of the class interval 46-50?
A. 50 B. 49 C. 48 D. 47

14. What is the sum of the frequency?
A. 46 B. 47 C. 48 D. 49

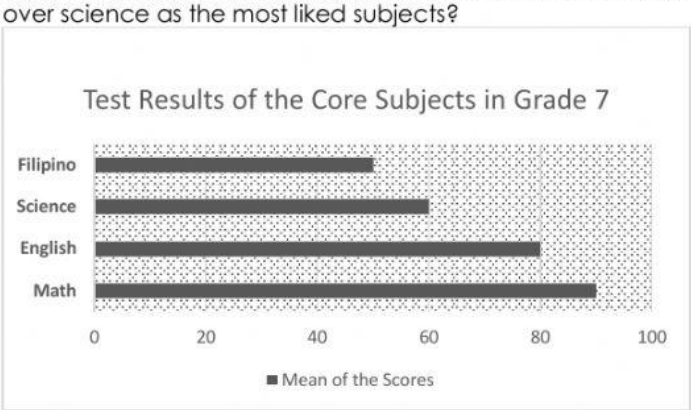
15. What is the range of the given set of data?
A. 49 B. 50 C. 51 D.52

16. What is variance of the given set of data?
A. 119.40 B. 119.49 C. 119.50 D. 119. 59

17. What is the standard deviation of the given set of data?
A. 10.90 B. 10.91 C. 10.92 D. 10.93

18.If the variability is higher, then the data values are more scattered or spread out and the mean is less reliable.
A. True B. False C. Maybe D. None

19. Refer to data below, About how many students choose mathematics over science as the most liked subjects?



A. 10 B. 15 C. 20 D. 30

20. The standard deviation cannot be negative.
A. True B. False C. Maybe D. None

LIVEWORKSHEETS