

MATHEMATICS 9
2nd Summative Test A
SY 2020-2021

I. Read each question carefully. Choose the letter of the correct answer.

1. What is **NOT** true about mode?

- a. There can be no mode in a set of numbers.
- b. Mode is the number that appeared the most.
- c. There can be more than one mode in a set of numbers.
- d. If all numbers in a set appeared twice, then all of them are mode.

2. Which statement describes inverse proportions?

- a. An increase in one quantity does not affect the other quantity.
- b. An increase in one quantity produces decrease in one quantity.
- c. A decrease in one quantity produces decrease in the other quantity.
- d. An increase in one quantity produces increase in the other quantity.

3. Which terms are the extremes in the proportion $12 : 21 = 24 : 42$?

- a. 12 and 42
- b. 12 and 24
- c. 21 and 24
- d. 21 and 42

4. What do you call the difference between the highest and the lowest number in a set of data?

- a. mean
- b. median
- c. mode
- d. range

5. What do you call a proportion wherein a whole is divided into parts proportional to the given ratio?

- a. ratio
- b. direct proportion
- c. indirect proportion
- d. partitive proportion

6. How to determine the median if there are even amount of numbers in a set of data after arranging them in order?

- a. subtract the two number in the middle

- b. multiply the two numbers in the middle
- c. add the numbers in the middle then, divide by two
- d. subtract the two numbers in the middle then, multiply by two

7. What do you call a measure of how quickly an object moves from one place to another and is equal to the distance traveled divided by the time?

- a. speed
- b. distance
- c. time
- d. mean

II. Study the table below and identify if the following statements about it are **TRUE** or **FALSE**.

Dominic's final grade in each subject are as follow:			
Math	88	Social Studies	91
Science	90	CLE	92
English	89	TLE	92
Filipino	87		

- 1. The median of Charlie's grades is 90.
- 2. The most frequent grade that Charlie has is 90.
- 3. The difference between Charlie's lowest and highest grade is 6.
- 4. Charlie's average grade is 89.86 rounded to the nearest hundredths place.
- 5. In order for Charlie to have an average of exactly 90, his grade in one of the subjects must be 1 point higher.

III. Identify whether the following situations show **DIRECT** or **INVERSE** proportion.

_____ 1. the number of soldiers in a camp and the amount of food they need

_____ 2. the number of guests in a wedding reception and the cost of the wedding

_____ 3. the number of students decorating the room and the time to finish the work

IV. Solve the following problems. Show your solutions and encircle your final answers.

Problem	Solution
1. It takes 6 hours for 4 men to repair a road. How long will it take 8 men to do the job if they work at the same rate?	
2. A machine can pack 27 boxes of canned goods in 15 minutes. How long will it take the machine to pack 162 boxes?	
3. The inheritance of two brothers is amounting to P750, 000. If the ratio of the share of the younger brother to that of the elder brother is 3:5, how much will the younger brother get?	
4. A bag of rice can feed a family of four in 12 days. If there are only three members of the family who will consume the bag of rice, how long will the bag of rice last?	

5. The angles of a quadrilateral are in the ratio 2: 4: 6: 8. The sum of the measures of the angles of a quadrilateral is 360° . What is the measure of the largest angle?