

**MATHEMATICS 9**  
2<sup>nd</sup> 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<br>are as follow: |           |                           |           |
|---------------------------------------------------------|-----------|---------------------------|-----------|
| <b>Math</b>                                             | <b>88</b> | <b>Social<br/>Studies</b> | <b>91</b> |
| <b>Science</b>                                          | <b>90</b> | <b>CLE</b>                | <b>92</b> |
| <b>English</b>                                          | <b>89</b> | <b>TLE</b>                | <b>92</b> |
| <b>Filipino</b>                                         | <b>87</b> |                           |           |

- \_\_\_\_\_ 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  $360^\circ$ . What is the measure of the largest angle?