FIRST QUARTERLY ASSESSMENT
GRADE 10 MATHEMATICS
SY 2022 - 2023

Name:_____ Grade/Section:_____Date:_____Score:_____

PART I- MULTIPLE CHOICE. Read each statement carefully and choose the letter that best corresponds to the statement. Write ONLY the letter of your answer on the space provided for at the right.

1. Narisa wants to find the fifth term of a sequence -12 ,-7, -2, -3 which concept will you suggest to be used?
    a. Arithmetic Sequence   b. Geometric Sequence   c . Fibonacci   d. Harmonic

2. Which of the following is an arithmetic sequence?
    a. 21, 18, 15,…   b. -6, -2, 2…   c. 4, 2, 0   d. 80, 20, 5…

3. Which among the following is NOT a geometric sequence?
    a. 5, 10, 20, 40b. -11, 22, -44, 88   c. 2, 6, 18, 54   d. 3, 8, 13, 18

4. If 1, -1/2, ¼, -1/8 is a geometric sequence, what is the common ratio?
    a. 1/2   b. -1/2   c. 1/4   d. -1/4

5. In the sequence 1, 4, 7, 10, 13, 16, what is the common difference?
    a. 3   b. 4   c. -3   d. -4

6. An r in the geometric sequence is referred to a common ratio, which among the following best describes it?
    a. It is the fixed amount multiplied.
    b. To find the common ratio, divide the second term by the first term.
    c. It cannot be equal to zero.
    d. ALL OF THE ABOVE.

7. The following are examples of Fibonacci sequence EXCEPT:
    a. 0, 1, 1, 2, 3, 5   b. 2, 3, 5, 8, 13   c. 192, 16, 208, 224   d. 1, 4, 7, 10, 13

8. Which among the following is the harmonic sequence of a sequence 3, 8, 13, 18?
    a. -3, -8, -13, -18   b. 1/3, 1/8, 1/13, 18 c. 3.0, 8.0, 13.0 d. NONE OF THE ABOVE

9. What is the fiftieth term of the arithmetic sequence 3, 7, 11, 15…?
    a. 53   b. 151   c. 199   d. 203

10. What is the twentieth term of the arithmetic sequence 21, 18, 15, 12, ... ?
    a. -39   b. -36   c. 1   d. 78

11. The fifth term of an arithmetic sequence is 11 and the tenth term is 41. What is the first term?
    a. -19   b. -13   c. -9   d. 6

 12. What is the thirty-second term of the arithmetic sequence -12, -7, -2, 3, ... ?

    a. 143   b. 148   c. 153   d. 167

13. Find the tenth term of the arithmetic sequence 1, 6, 11, 16…

    a. 40   b. 42   c. 44   d. 46

14. Find the 27th term of the arithmetic sequence -4, -1, 2, 5, 8.
    a. 70   b. 72   c. 74   d. 76

15. What is the sum of the first sixteen terms of the arithmetic sequence 1, 5, 9, 13. ?
    a. 62   b. 496   c. 528   d. 992

16. What is the sum of the first 30 terms of the arithmetic sequence 50, 45, 40, 35?
    a. -675   b. 275   c. 675   d. 3675

17. What is the sum of the eleventh of the arithmetic sequence 7, 12, 17, 22, ... ?
      a. 154   b. 295   c. 795   d. 1090

18. Find the 7th term of the sequence 2, 6, 18, 54?
      a. 100   b. 500   c. 1300d. 1458

19. What is the 5th term for the sequence 3, 6, 12, 24.....?
      a. 36   b. 40   c. 48   d. 52

20. What is the common difference of the sequence 3, 11, 19, 27, 35?
      a. -8   b. 8   c. -14   d. 14

21. Find the sum of the geometric sequence 3, 6, 12, 24, 48, 96.
      a. 189   b. -189 c. 190   d. -190

22. Find the sum of the geometric sequence 2, 8, 32, 128, 512.
      a. 682   b. 684   c. 686   d. 688

23. Find the sum of the geometric sequence 2, ½, 1/8……..
      a. 8/3   b. 9/3   c. 10/3 d. 11/3

24. What is the next term of the sequence 3, 4, 7, 11, 18, 29?
      a. 46   b. 47   c. 48   d. 49

25. Find the next two terms of the sequence 192, 16, 208, ____, _____….7408.
      a. 208 and 224 b. 200 and 224 c. 300 and 224 d. 400 and 224

26. The first term of an arithmetic sequence is equal to 200 and the common difference is equal to -10. Find the value of the 20th term.
      a. 10   b. 20   c. 30   d. 40

27. A display of cans on a grocery shelf consists of 20 cans on the bottom, 18 cans in the next row, and so on in an arithmetic sequence, until the top row has 4 cans. How many cans, in total, are in the display?
      a. 100 b. 108   c. 116. d. 124

28. How many terms of the arithmetic sequence -3, 2, 7….must be added together for the sume of the series to be 116?
      a. 8   b. 9   c. 10   d. 11

29. QAR, RAS, SAT, TAU, _____.
      a. UAVb. UAT   c. TAS d. TAT

30.   EⅢE | ⅢⅢⅢ | EⅢE | Ⅲ ? Ⅲ

      (1)   (2)   (3)   (4)

      a. 1   b. 2   c. 3   d. 4