NAME: _____ QUARTER: _____

GR. & SEC - _____ DATE: _____

REMEDIAL CLASS ACTIVITY # 1
Generating Patterns in Sequences

DIRECTION: Read and understand the questions carefully. Check the box that corresponds to your answer.

1. Which of the following defines infinite sequence?

- Days of the week
- Every other day
- Teenage life
- First Fridays of July 2021

2. What are the next three terms of the sequence: 1, 11, 22, 34, ...?

- 46, 60, 75
- 42, 54, 66
- 47, 61, 76
- 44, 60, 74

3. What is the 25th term of the sequence: $a_n = \frac{(-1)^n}{n^2}$?

- $\frac{1}{625}$
- $\frac{25}{625}$
- $-\frac{1}{625}$
- $-\frac{25}{625}$

4. What is the 11^{th} term in the sequence: -1, 4, -9, 16, -25, ...?

- 100
- 121
- -100
- -121

5. Find the first four terms of the sequence: $a_n = 3n + 2$.

- 5, 7, 11, 14
- 5, 8, 11, 14
- 5, 8, 11, 15
- 5, 9, 13, 17

6. What is the 8^{th} term in the sequence: 9, 4, -1, -6, -11, ... ?

- -21
- -31
- -26
- -36

7. Which of the following patterns shows finite sequence?

- 6, 12, 18, 24, 30, ...
- First 20 whole numbers
- Multiples of 6
- 100, 50, 25, 12.5, ...

8. Write the first four terms of the sequence: $a_n = n^2 - 1$?

- 0, 3, 8, 15
- 1, 5, 10, 16
- 1, 3, 5, 7
- 0, 2, 7, 12

9. Madison has the number patterns (5, 3, 8, 6, 11) for a homework problem. She says that the number pattern is alternately adding 5 and subtracting 2. Did Madison correctly describe the pattern?

- No, the pattern is alternately adding 5 and subtracting 2.
- No, the pattern is alternately subtracting 2 and adding 5.
- No, the pattern is alternately subtracting 3 and adding 4.
- Yes, Madison's description of the pattern is correct.

10. Which of the following shows a pattern?

- 3, 2, 3, 2, 3, 2
- A, G, M, T, O, 9
- 5, 7, 2, T, 6, Y
- Smooth, long, wall, sing

REFLECTION:

What have you learned in this activity?

LIVEWORKSHEETS