

## Grade 7/8 Math – **Intro Number Sequences**

Name: \_\_\_\_\_

*Number sequences are sometimes fun to analyze and to get the next few numbers. Simple ones are obvious and then we can get into ones that are less obvious. In grade 8, we have to be able to identify a specific type of sequence and then we will work more on the characteristics of these sequences. Let's start off with analyzing and predicting different types of sequences for fun. A pattern is a pattern since there is a structure or rule to the pattern.*

5, 6, 7, 8, 9, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

How do we know? Rule?

11, 21, 31, 41, 51, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

How do we know? Rule?

1, 2, 4, 8, 16, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

How do we know? Rule?

108, 54, 64, 32, 42, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

How do we know? Rule?

17, 22, 27, 32, 37, \_\_\_\_, \_\_\_\_, \_\_\_\_

How do we know? Rule?

12, 19, 14, 21, 16, 23, 18, \_\_\_\_, \_\_\_\_, \_\_\_\_

How do we know? Rule?

96, 92, 88, 84, 80, \_\_\_\_, \_\_\_\_, \_\_\_\_

How do we know? Rule?

99, 91, 83, 75, 67, 59, \_\_\_\_, \_\_\_\_, \_\_\_\_

How do we know? Rule?

4, 16, 8, 64, 32, \_\_\_\_, \_\_\_\_, \_\_\_\_

How do we know? Rule?

Can you make an interesting one?

Terms that we should know:

Sequence:

Term Number:

Term Value:

Linear Pattern/Sequence:

Exponential Pattern/Sequence:

Alternating Pattern/Sequence:

Interval

$n^{\text{th}}$  Term:

Generalized Algebraic Expression: