

## ARITHMETIC SEQUENCES ( \_\_\_\_\_ )

### WHAT IS AN ARITHMETIC SEQUENCE?

- **Arithmetic Sequences:** is created by \_\_\_\_\_ the growth rate
- **Linear Function:** is created by \_\_\_\_\_ the growth rate

### HOW TO SHOW A SEQUENCE IS ARITHMETIC/LINEAR?

- **What is the *Common Difference (CD)*/ *Growth Rate*:** is the number \_\_\_\_\_ to the previous term.
- **How to calculate Common Difference/ Growth Rate:** \_\_\_\_\_ — \_\_\_\_\_

### HOW TO WRITE A FORMULA FOR AN ARITHMETIC SEQUENCES?

#### Explicit Function:

- **How it works:** Describes outputs using their \_\_\_\_\_
- **Need**  $m =$  \_\_\_\_\_ /slope  
AND  $b =$  \_\_\_\_\_ / y-intercept
- \_\_\_\_\_ **Equation:** \_\_\_\_\_

#### Recursive Function:

- **How it works:** Describes outputs using the \_\_\_\_\_ output(s)
- **Need** first term  $a(\_)$  AND recursive rule  $a(\_) = a(\_)$
- **Equations:** \_\_\_\_\_;  
\_\_\_\_\_

### EXAMPLE OF AN ARITHMETIC SEQUENCE

# GEOMETRIC SEQUENCES ( \_\_\_\_\_ )

## WHAT IS A GEOMETRIC SEQUENCE?

- **Geometric Sequences:** is created by \_\_\_\_\_ the growth factor
- **Exponential Function:** is created by \_\_\_\_\_ the growth factor

## HOW TO SHOW A SEQUENCE IS GEOMETRIC/EXPONENTIAL?

- **What is the *Common Ratio (CD)/ Growth Factor:*** is the number \_\_\_\_\_ to the previous term.
- **How to calculate Common Ratio/ Growth Factor:** \_\_\_\_\_ — \_\_\_\_\_

## HOW TO WRITE A FORMULA FOR A GEOMETRIC SEQUENCES?

### Explicit Function:

- **How it works:** Describes outputs using their \_\_\_\_\_
- **Need**  $b =$  \_\_\_\_\_ / growth factor  
AND  $a =$  \_\_\_\_\_ / y-intercept
- \_\_\_\_\_ Equation: \_\_\_\_\_

### Recursive Function:

- **How it works:** Describes outputs using the \_\_\_\_\_ output(s)
- **Need** first term  $a(\_)$  AND recursive rule  $a(\_) = a(\_\_\_\_\_\_)$
- **Equations:** \_\_\_\_\_;  
\_\_\_\_\_

## EXAMPLE OF A GEOMETRIC SEQUENCE