**CCMath I Unit 5 Vocabulary: Exponential Functions**

| **Vocabulary Word** | **Definition** |
| --- | --- |
| Common ratio | **Common ratio** is the constant (r) multiplied by each term in the geometric sequence. |
| Explicit form | **Explicit form** of a geometric function refers to formally writing the function in the form A(n) = a \* rn - 1, where *a* is the initial value, *r* is the common ratio, and *n* is the term number. This includes using both standard form (y = a \* rx) and function notation (A(n) = a \* rn - 1). |
| Exponential growth | **Exponential growth** occurs when an exponential function has a *r* value greater than 1. |
| Geometric sequence | **Geometric sequence** isa sequence of numbers in which the same number is multiplied or divided by each element to get the next element in the sequence. |
| Initial term | **Initial term** is the first term of the sequence. |
| NOW-NEXT | **NOW-NEXT** form is the recursive process of getting from one number to the next number in the sequence. |
| Exponential function | is used to model a relationship in which a constant change in the independent variable gives the same proportional change (percent of increase or decrease) in the dependent variable. |
| Common Ratio | is the constant (r) multiplied by each term in the geometric sequence. |
| Explicit form | of a geometric function refers to formally writing the function in the form A(n) = a \* rn - 1, where a is the initial value, r is the common ratio, and n is the term number. This includes using both standard form (y = a  rx) and function notation (A(n) = a  rn - 1). |
| Exponential Decay | occurs when an exponential function has a r value between 0 and 1. |
| Geometric Sequence | is a sequence of numbers in which the same number is multiplied or divided by each element to get the next element in the sequence. |
| Initial Term | is the first term of the sequence. |
| NOW-NEXT | form is the recursive process of getting from one number to the next number in the sequence. |