**Unit 2: Advanced Functions – Vocabulary**

* Relation: a collection of ordered pairs containing one object from each set
* Independent Variable: the variable that does not depend on the other variable (x variable)
* Dependent Variable: the variable that depends on the other variable (y variable)
* Function: each input has on output; must pass the vertical line test
* Domain: set of values from the independent variable (x-values)
* Range: set of values from the dependent variable (y-values)
* Vertical Line Test: visual way to determine if a curve on a graph is a function
* One-to-one: every y-value corresponds to one x-value
* Horizontal Line Test: used to determine if a function is one-to-one
* Extrema: value of a function at its largest and smallest peaks
* Linear Function: function that graphs a line
* Correlation Coefficient: number between -1 and 1 to determine the linear dependence of values
* Polynomial of degree n: can have an even number of roots fewer than the degree n
* Monomial: one term polynomial
* Zeros or Roots: member of the domain where y = 0