

# **Algebra 1 – Unit 2: Introduction to Functions**

## **Expectations, Essential Questions, Enduring Understandings, Indicators and Vocabulary**

### **Expectation**

1.1 analyze a wide variety of patterns and functional relationships using the language of mathematics and appropriate technology.

### **Essential Questions**

How are functions and relations useful?

How are patterns of change represented in functions?

### **Enduring Understanding**

Functions and their representations are used to model and analyze real-world applications and quantitative relationships.

### **Indicators**

1.1.1 recognize, describe, and/or extend patterns and functional relationships that are expressed numerically, algebraically and/or geometrically.

1.1.1.a determine whether a relation that is expressed numerically or graphically is a function

1.1.2 represent patterns and/or functional relationships in a table, as a graph, and/or by mathematical expression.

### **Vocabulary**

arithmetic sequence

common difference

dependent variable

domain

equation in two variables

function

function notation

independent variable

inverse relation

linear equation

linear functions

mapping

non-linear functions

ordered pairs

range

rate of change

relation

solution

table of values

terms of a sequence

vertical line test

$x$ -intercept

$y$ -intercept