## Unit 3: Introduction to Functions

## Content Standards

## Major Standards

F-IF.A. 1 Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If $f$ is a function and $x$ is an element of its domain, then $f(x)$ denotes the output of $f$ corresponding to the input $x$. The graph of $f$ is the graph of the equation $y=f(x)$

## Supporting Standards

F-BF.A. 1 Write a function that describes a relationship between two quantities.*
a. Determine an explicit expression, a recursive process, or steps for calculation from a context.

F-IF.A. 2 Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

F-IF.B. 5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.*

F-IF.B. 6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.*
Additional Standards:

Pre-requisite Standards

## Time Frame: 1 Weeks (Sept 8-15)

## Standards for Mathematical Practice

(1) Make sense of problems and persevere in solving them.
(2) Reason abstractly and quantitatively.
(3) Construct viable arguments and critique the reasoning of others.
(4) Model with mathematics.
(5) Use appropriate tools strategically.
(6) Attend to precision.
(7) Look for and make use of structure.
(8) Look for and express regularity in repeated reasoning.
** Note: MPs taken from the Flip Book By McGraw Hill.

Hattiesburg Public School District
Algebra I Mathematics Units
2015-2016

| Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 |
| :---: | :---: | :---: | :---: | :---: |
| Lesson 6 | Lesson 7 | Lesson 8 | Lesson 9 | Lesson 10 |
|  |  |  |  |  |

