## SM3-Essentials Unit 1-1 Vocabulary

<u>Relation</u>: A "<u>mapping</u>" or pairing of <u>input</u> values to <u>output values</u>.

Function: A relation where each input has exactly one output.

Domain: the set made up of all of the input values that have corresponding output values.

<u>Range</u>: the <u>set</u> made up of <u>all</u> of the <u>corresponding output values</u>.

<u>6 ways to show a relation</u> between <u>input</u> and <u>output</u> values. (1) ordered pairs, (2) table, (3) graph, (4) equation, (5) mapping, and (6) "function notation"

<u>Function Notation</u>: When we say "y is a function of x" we mean We are "<u>doing math</u>" (performing mathematical operations) on the input value 'x' to determine the corresponding output value 'y'. y = f(x)

<u>y-intercept</u>: the x-y pair where a graph crosses the y-axis, or, the y-value that corresponds an input value of zero, or the value 'b' in the equation y = mx + b.

Solution of a two-variable equation: all x-y pairs that make the equation "true".