

SM2 VOCAB 4-1 (Functions, Relations, and the Absolute Value Function)

Relation: A “mapping” or pairing of input values to output values.

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.

Range: the set made up of all of the corresponding output values.

6 ways to show a relation between input and output values.

(1) ordered pairs, (2) table, (3) graph, (4) equation, (5) mapping, and (6) “function notation”

Function Notation: When we say “y is a function of x” we mean We are “doing math” (performing mathematical operations) on the input value ‘x’ to determine the corresponding output value ‘y’. $y = f(x)$

y-intercept: 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 $y = mx + b$.