Relations and Functions

(Teacher Page)

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| **Relation**: comparison between 2 variables (x and y)   * Height and weight * Study time and grade |
| **Linear equation**: (one type of relation)   * Constant Relationship between 2 variables * Graphs are linear – straight lines * 4 types of Graphs (Draw all 4 types: vertical, horizontal, upward from left to right, downward from left to right) |
| **Function**:   1. special type of relationship between 2 variables (x and y) 2. 1 input (x) for each output (y) 3. Different Representation  * function rule: specific type of equation that is a function * function table: set of values of a function * graph of a function   + Do not have to be linear   + Cannot contain vertical sections throughout the graph   + Must pass the vertical line test |
| **Vertical Line Test**: a method used to determine if the graph of a relation is a function; a relation is a function if there are no vertical lines that intersect the graph at more than one point |