**Relation**

**Domain**

**Range**

**Function**

**Rule**

**Independent Variable**

**Input**

**Dependent variable**

**Output**

**EX: {(1,2)(1,3)(2,2)(2,3)}**

**EX: {(1,2)(1,3)(2,2)(2,3)}**

**Domain:**

**EX: {(1,2)(1,3)(2,2)(2,3)}**

**Range:**

**EX: {(1,2)(1,3)(1,4)(1,5)}**

**Is it a function? Why/Why not?**

**EX: {(2,2)(3,2)(4,1)(5,1)}**

**Is it a function? Why/Why not?**

**EX: **

**EX: **

****

**Independent:**

**EX: **

****

**Dependent:**

**Any set of ordered pairs (x,y) for each first member (x-domain) there may be many second members (y-range)**

**The SET of all input values for the independent variable (x) in a given situation**

**The SET of all output values for the dependent variable(y) in a given situation**

**A relation in which there is one and only one second member for each first member**

**\*the domain can repeat but the range cannot**

**\*All functions are relations but only SOME relations are functions**

**\*on a graph, a function is any curve (including straight lines) such that any vertical line would pass through only once**

**Rules that relate elements in two sets can be represented by word sentences, equations, tables of values, graphs, or illustrated pictorially.**

**The variable for the input of the function**

**\*deliberately manipulated to invoke change in the dependent variable**

**The variable for the output of the function**

**\*changes in response to the independent variable**