**BLM 7.PR.3: Directions for Playing a Relations Game**

This relations game can be adapted to any skill level, and can be used at the beginning or end of any class to keep students’ relational thinking sharp.

**Name of the Game**

* Choose a name for the game (e.g., Guess My Number, Inputs and Outputs, Relation Machine).

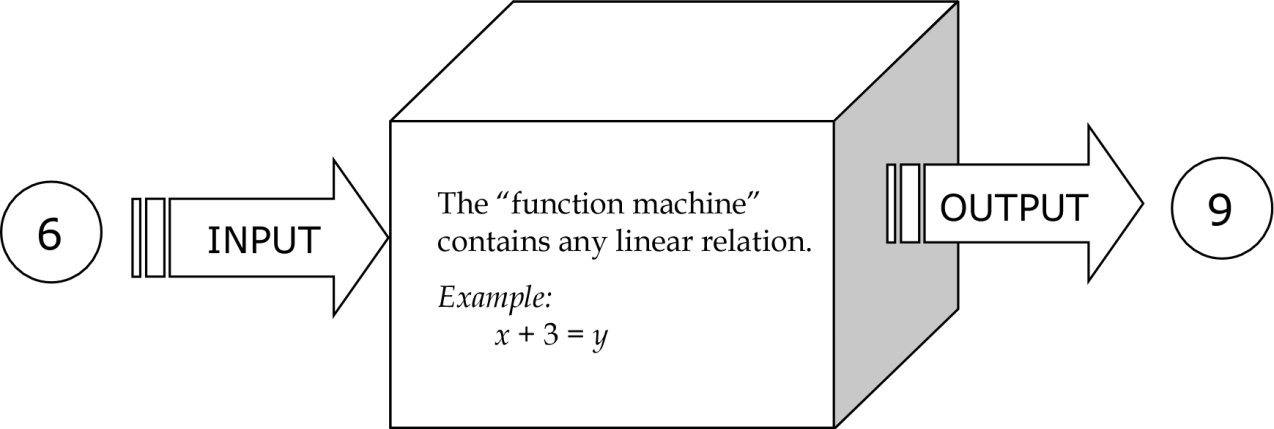
**Structure of the Game**

* Put a number into the relation and get another number out.
* The relation is available only to the operator and is hidden from everyone else.

**Object of the Game**

* Examine the inputs and outputs, and determine the explicit relation.

*Example:*

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**Order of Play**

* The operator creates a relation, or receives one from the director.
* Students suggest inputs, and the operator plugs the inputs into the *x* value of the equation and puts out the *y* value (output)*.*
* Individuals or a class recorder keep track of the inputs and outputs in a table of values. Students look for the explicit relation between the numbers, and, when they determine the relation, they submit it to the operator or director. The person who guesses the relation or equation becomes the new operator and resets the machine with a new relation.

**Note:** Be aware of equivalent relations when selecting and determining relations and when evaluating options.