## Unit 6 Lesson 1: Inputs and Outputs

### 1 Dividing by 0 (Warm up)

#### Student Task Statement

Study the statements carefully.

* because
* because

What value can be used in place of to create true statements? Explain your reasoning.

### 2 Guess My Rule

#### Student Task Statement

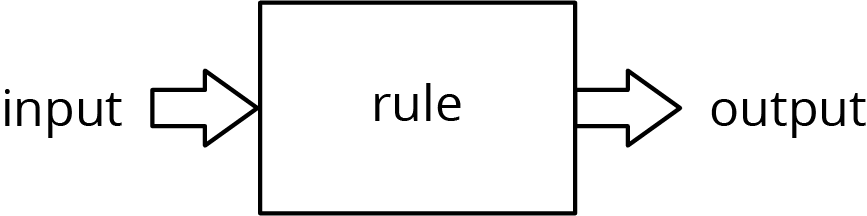
Keep the rule cards face down. Decide who will go first.

1. Player 1 picks up a card and silently reads the rule without showing it to Player 2.
2. Player 2 chooses an integer and asks Player 1 for the result of applying the rule to that number.
3. Player 1 gives the result, without saying how they got it.
4. Keep going until Player 2 correctly guesses the rule.

After each round, the players switch roles.

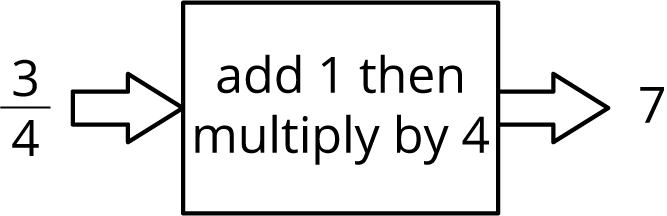
### 3 Making Tables

#### Images for Launch

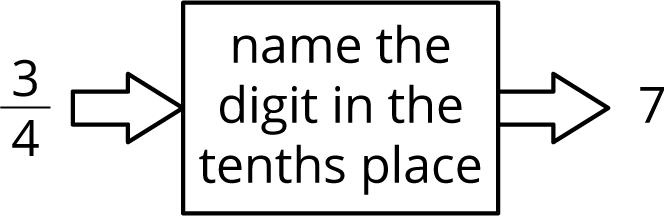


#### Student Task Statement

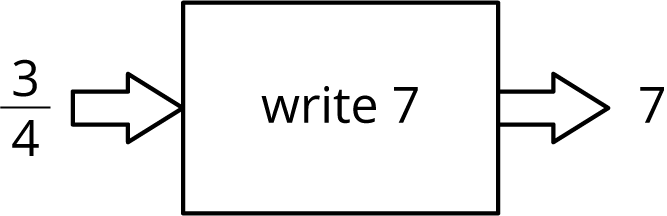
For each input-output rule, fill in the table with the outputs that go with a given input. Add two more input-output pairs to the table.

1. 

|  |  |
| --- | --- |
| * input | * output |
|  | * 7 |
| * 2.35 |  |
| * 42 |  |
|  |  |
|  |  |

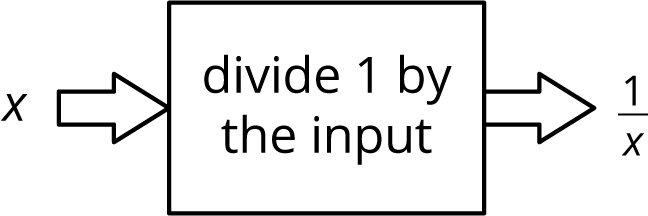
1. 

|  |  |
| --- | --- |
| * input | * output |
|  | * 7 |
| * 2.35 |  |
| * 42 |  |
|  |  |
|  |  |

1. 

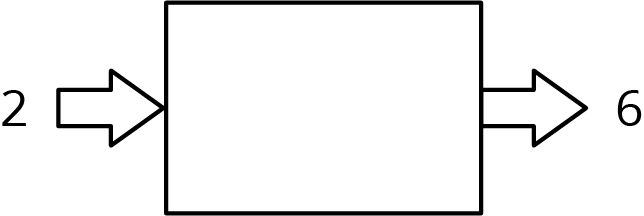
|  |  |
| --- | --- |
| * input | * output |
|  | * 7 |
| * 2.35 |  |
| * 42 |  |
|  |  |
|  |  |

* Pause here until your teacher directs you to the last rule.

1. 

|  |  |
| --- | --- |
| * input | * output |
|  |  |
| * 1 |  |
| * 0 |  |
|  |  |

#### Activity Synthesis





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