

# Unit 5 Lesson 1: Inputs and Outputs

## 1 Dividing by 0 (Warm up)

### Student Task Statement

Study the statements carefully.

- $12 \div 3 = 4$  because  $12 = 4 \cdot 3$
- $6 \div 0 = x$  because  $6 = x \cdot 0$

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

## 2 Guess My Rule

### Student Task Statement

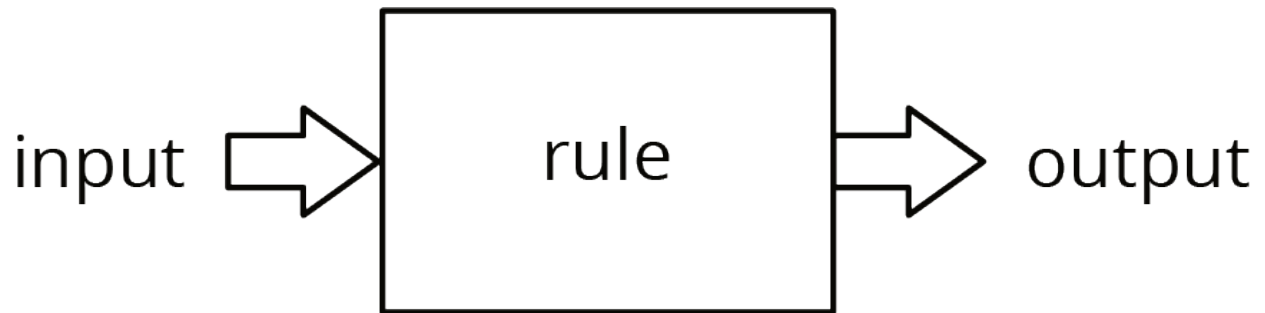
Keep the rule cards face down. Decide who will go first.

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

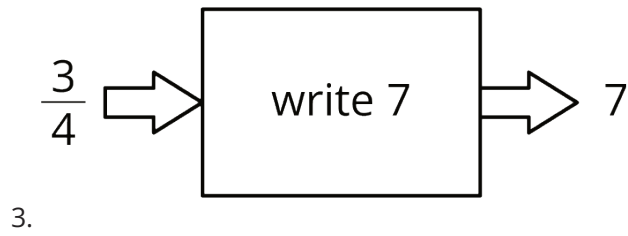
For each input-output rule, fill in the table with the outputs that go with a given input. Add two more input-output pairs to the table.

1.  $\frac{3}{4}$  → add 1 then  
multiply by 4 → 7

input	output
$\frac{3}{4}$	7
2.35	
42	

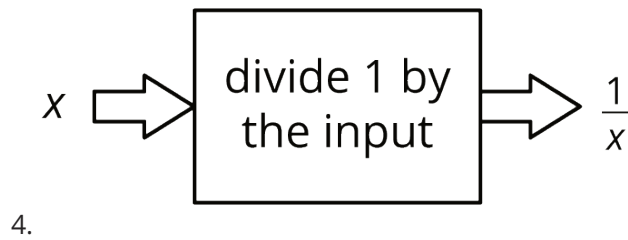
2.  $\frac{3}{4}$  → name the  
digit in the  
tenths place → 7

input	output
$\frac{3}{4}$	7
2.35	
42	



input	output
$\frac{3}{4}$	7
2.35	
42	

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



input	output
$\frac{3}{7}$	$\frac{7}{3}$
1	
0	

Activity Synthesis

