

Practice

1. For each Input/Output machine:

- Copy and complete the table.
- Write the pattern rule that relates the input to the output.
- Write the pattern rule for the input.
- Write the pattern rule for the output.

Input	Output
1	
2	
3	
4	
5	

a)



b)

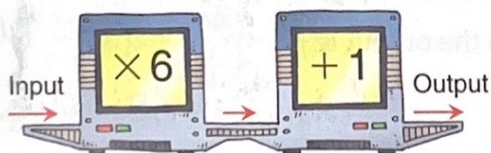


2. For each Input/Output machine:

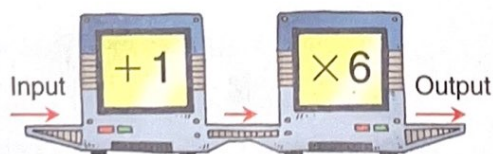
- Copy and complete the table.
- Write the pattern rule that relates the input to the output.
- Write the pattern rule for the input.
- Write the pattern rule for the output.

Input	Output
2	
4	
6	
8	
10	

a)



b)



3. Look at question 2 and your tables.

- How are the Input/Output machines the same?
How are they different?
- How do the output numbers from the two machines compare? Explain.
- Is it possible to get more than one output number for each input? How do you know?

4. Copy and complete this table.
The pattern rule that relates the input to the output is:
Divide the input by 6.
- Write the pattern rule for the input.
 - Write the pattern rule for the output.

Input	Output
36	
42	
48	
54	
60	

5. Copy and complete this table.
The pattern rule that relates the input to the output is:
Divide the input by 3, then subtract 2.
- Write the pattern rule for the input.
 - Write the pattern rule for the output.

Input	Output
30	
60	
90	
120	
150	

6. The pattern rule that relates the input to the output is:
Add 4 to the input. Then divide by 2.
Check the data in the Input/Output table.
Identify any output numbers that are incorrect.
How do you know they are incorrect?
Show your work.

Input	Output
4	2
8	4
16	10
26	15
30	19



7. The pattern rule that relates the input to the output is:
Divide the input by 6, then add 5.
- Check the data in the Input/Output table.
Identify any output numbers that are incorrect. How do you know they are incorrect?
 - Correct the table.
 - Write 3 more input and output numbers for this pattern rule.
Show your work.

Input	Output
6	6
12	7
30	10
42	2
54	15