Practice ....

1. Each table shows the input and output from a machine with one operation. For each table:
   - Identify the number and the operation in the machine.
   - Continue the patterns.
     Write the next 4 input and output numbers.
   - Write the pattern rule that relates the input to the output.

a)

Input	Output
1	7
2	14
3	21
4	28

b)

Input	Output
50	39
49	38
48	37
47	36

c _____ _____

_____ _____

_____ _____

2. Each table shows the input and output from a machine with two operations. For each table:
   - Identify the numbers and the operations in the machine.

   - Predict the output when the input is 10. Check your prediction.

a)

Input	Output
1	2
2	5
3	8
4	11

b)

Input	Output
1	9
2	14
3	19
4	24

c)

Input	Output
3	3
4	5
5	7
6	9

d)

Input	Output
4	17
5	21
6	25
7	29

3. Each table shows the input and output from a machine with two operations.
   - Find the pattern rule that relates the input to the output.
   - Use the pattern rule to find the missing numbers in the table.
   - Use the patterns in the columns to check your answers.
   - Predict the output when the input is 40. Check your prediction.

a)

Input	Output
5	21
6	24
7	27
?	30
9	?
10	?

b)

Input	Output
0	1
5	2
10	3
?	4
20	?
25	?

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- Write a pattern rule that relates the input to the output.
- Predict the output when the input is 9. Extend your pictures to check.
- Which input has an output of 28? Describe the strategy you used to find out.

Input	Output
1	6
2	8
3	10
4	12

5) Write the pattern rule that relates the input to the output

a)

Input	Output
1	15
2	19
3	23
4	27

b)

Input	Output
1	4
2	10
3	16
4	22

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