

1 Whitney makes a pattern of triangles using lolly sticks.

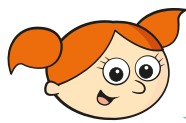
Complete the table.



Number of triangles	1	2	3	4	5	10	
Number of lolly sticks							90

2 Complete the tables.

a)



To find the number of wheels, you multiply the number of bicycles by 2

Number of bicycles	1	2	5			16
Number of wheels	2			18	24	

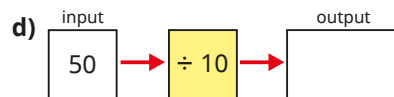
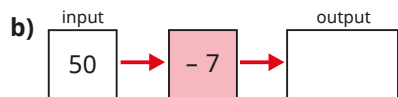
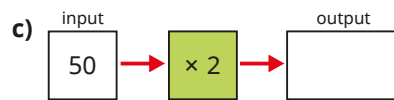
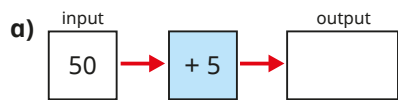
b)



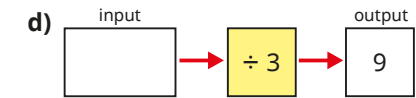
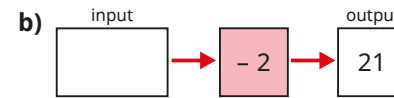
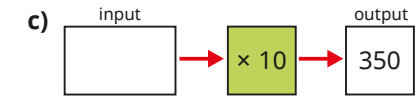
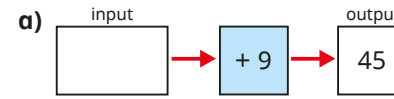
Number of ants	1	2	5			16
Number of legs	6			18	24	

Explain how to find the number of legs.

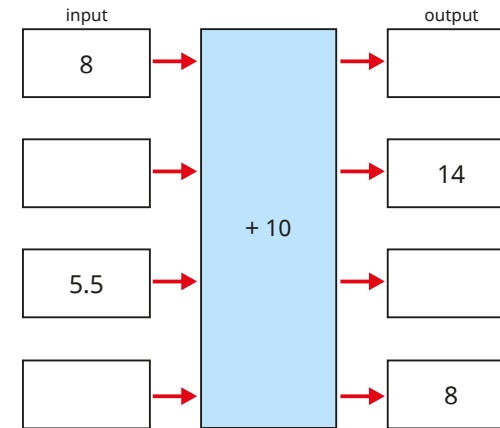
3 Calculate the outputs for the function machines.



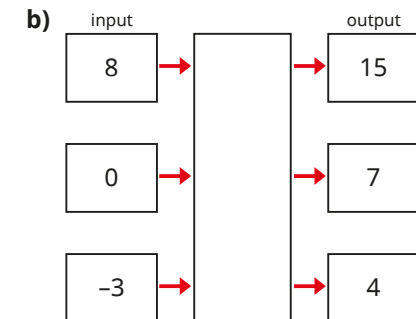
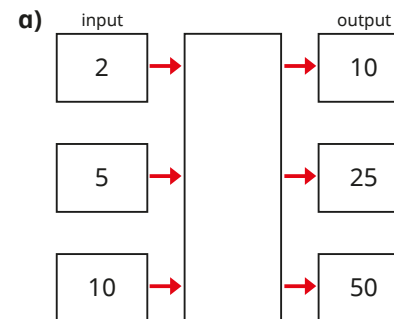
4 Calculate the inputs for the function machines.



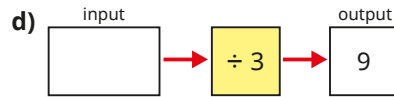
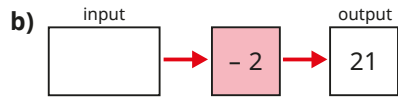
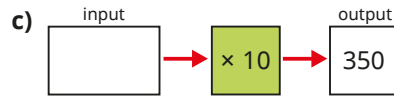
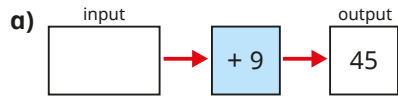
5 Complete the function machine.



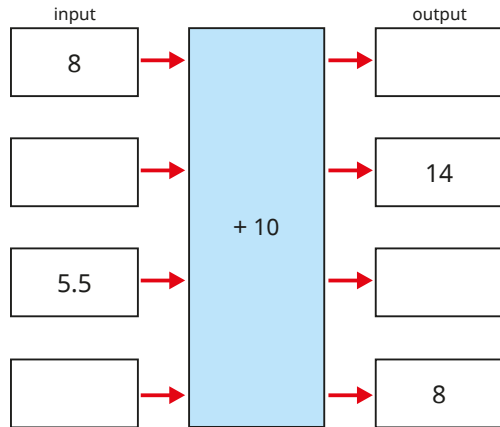
6 Write the missing functions.



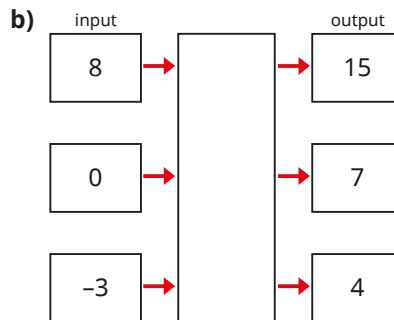
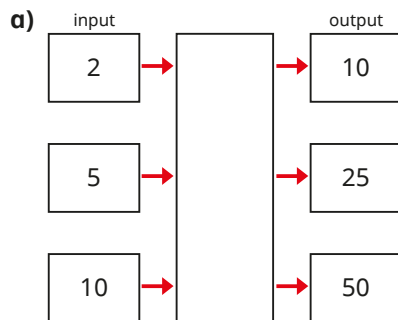
4 Calculate the inputs for the function machines.



5 Complete the function machine.

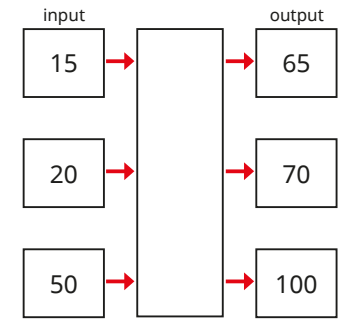


6 Write the missing functions.

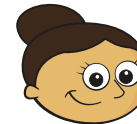
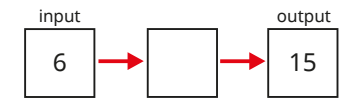


7 Here is a function machine.

- What is the output, if the input is zero?
- What is the input, if the output is zero?
- If the input is 0.5, what is the output?
- If the output is 1,000, what is the input?

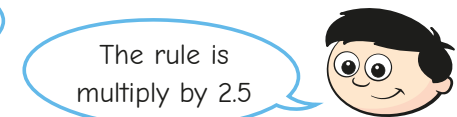


8 Here is a function machine.



Dora

The rule is add 9



Dexter

The rule is multiply by 2.5

Who do you agree with?
Explain your answer.

9 Write two different functions and complete the table of outputs for the function machine.

Function machine:

input	output
3	12

Input	3	4	5	10	20	100
Output	12					