

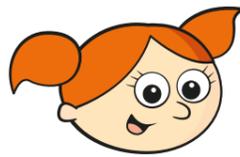
Find a rule – one step

- 1 Whitney makes a pattern of triangles using sticks. Complete the table below.



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

- 2 Complete the tables.



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

a)

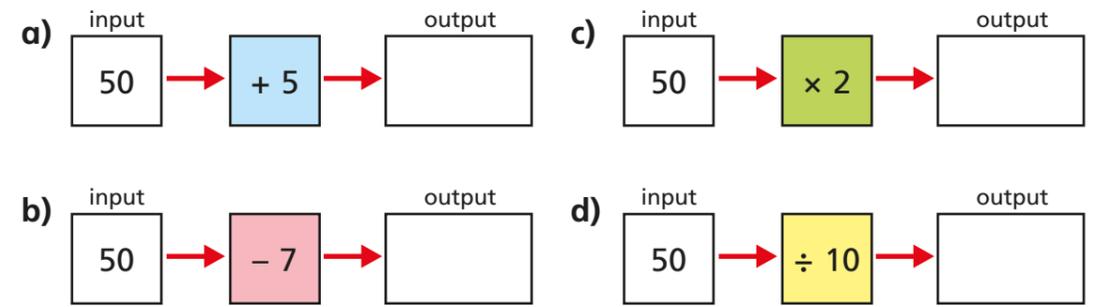
Number of bicycles	1	2	5			16
Number of wheels	2			18	24	

b)

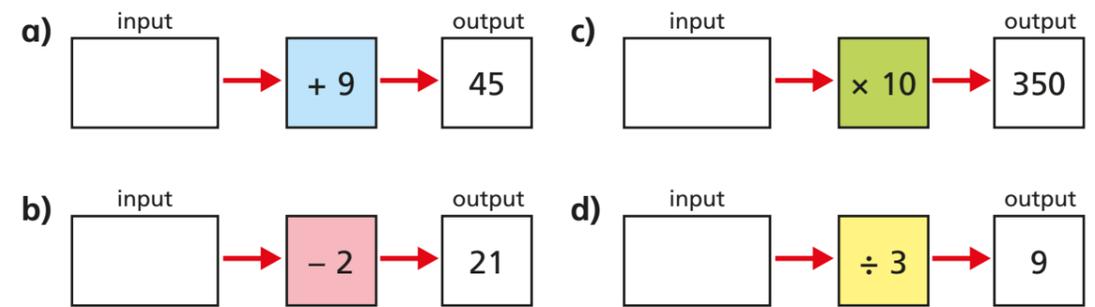
Number of ants	1	2	5			16
Number of legs		12		18	24	

Explain how to find the number of legs.

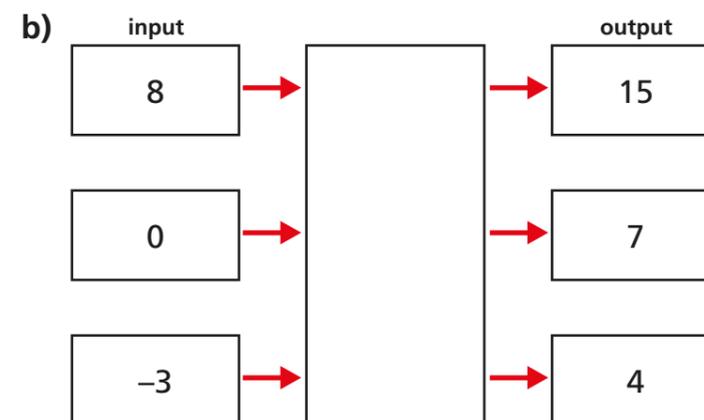
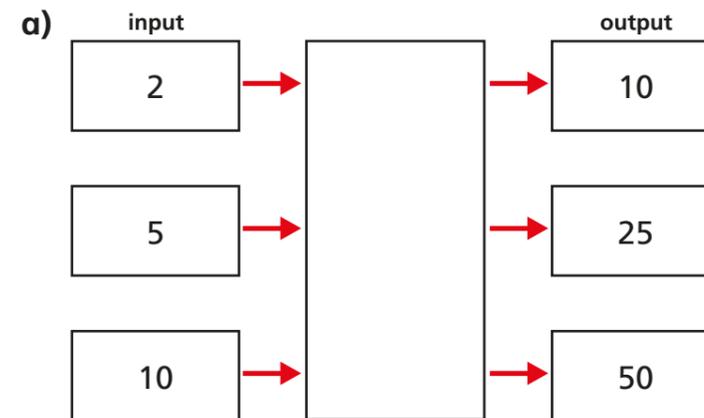
- 3 Calculate the outputs for the function machines below.



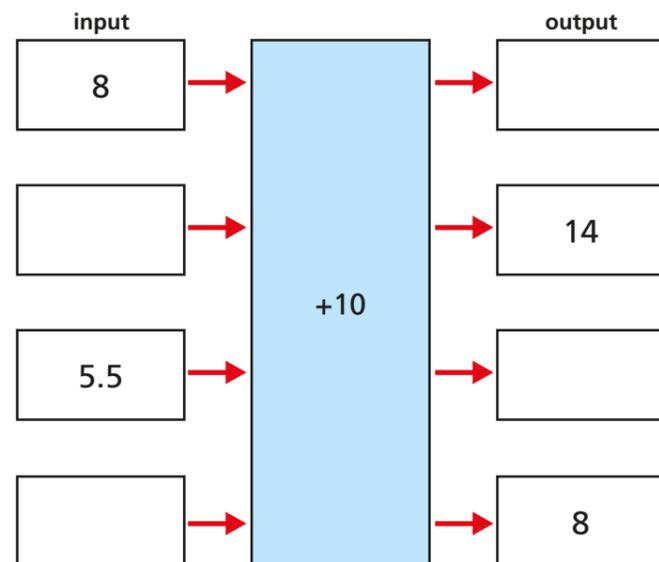
- 4 Calculate the inputs for the function machines.



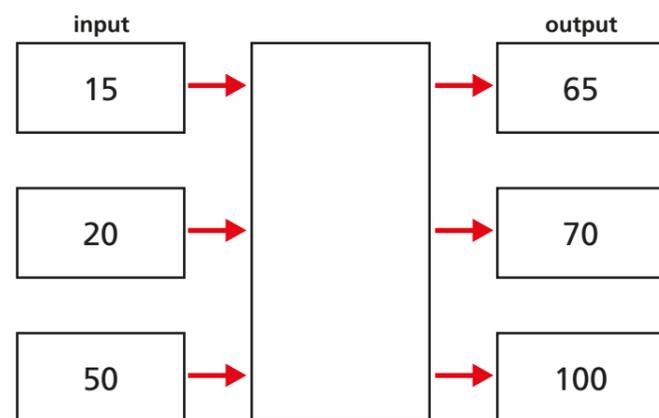
- 5 Write the missing functions in the function machines.



6 Calculate the missing inputs and outputs for the function machine.



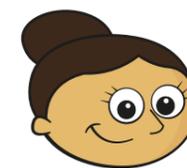
7 Look at the function machine.



a) What is the output, if the input is zero?

b) What is the input, if the output is zero?

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 In a function machine, if the input is 3 and the output is 12, what could the function be?

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



Input	3	4	5	10	20	100
Output	12					



Input	3	4	5	10	20	100
Output	12					