

1-step function machines



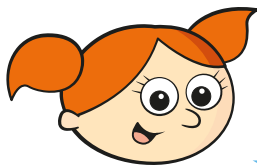
1 Whitney makes a pattern of triangles using lolly sticks. Complete the table.



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

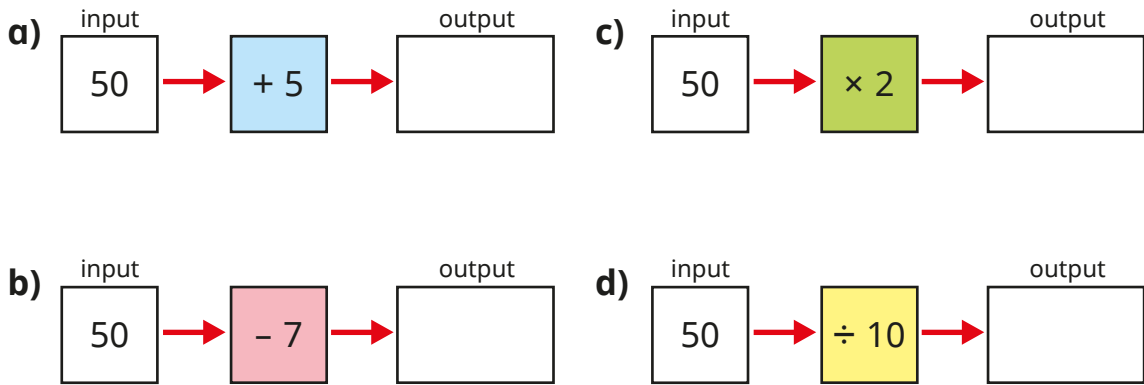
Number of bicycles	1	2	5			16
Number of wheels	2			18	24	

b)

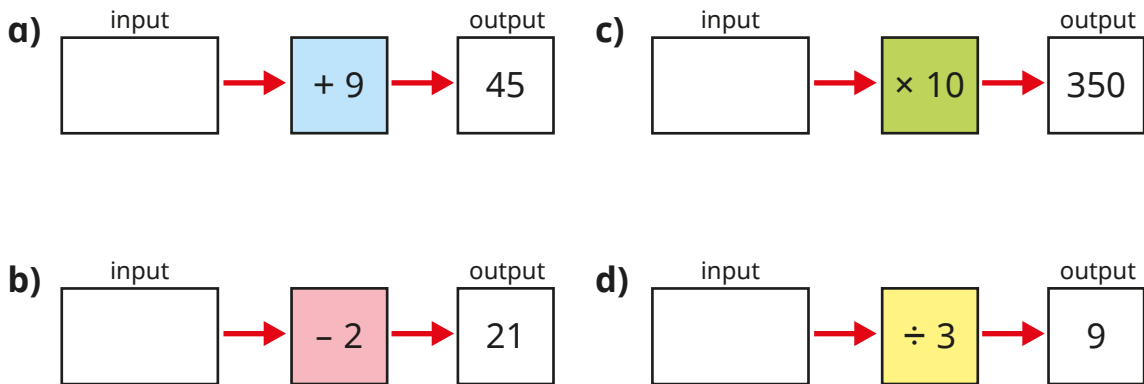
Number of ants	1	2	5			16
Number of legs	6			18	24	

Explain how to find the number of legs.

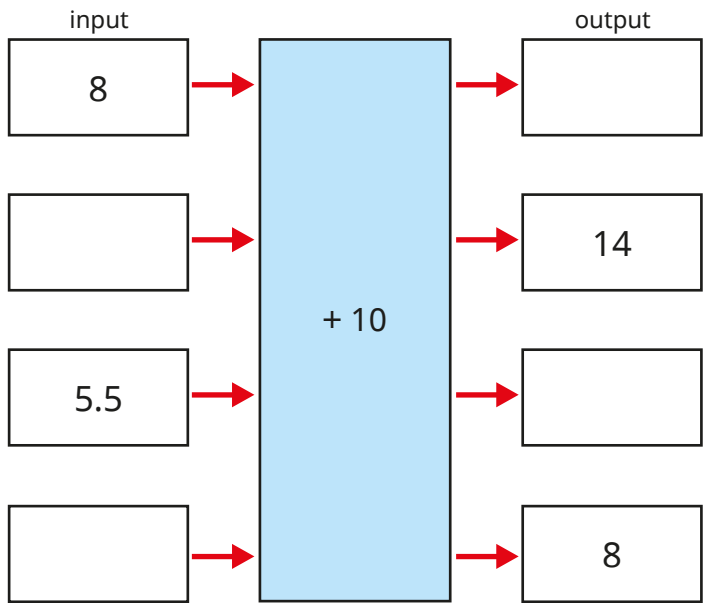
3 Calculate the outputs for the function machines.



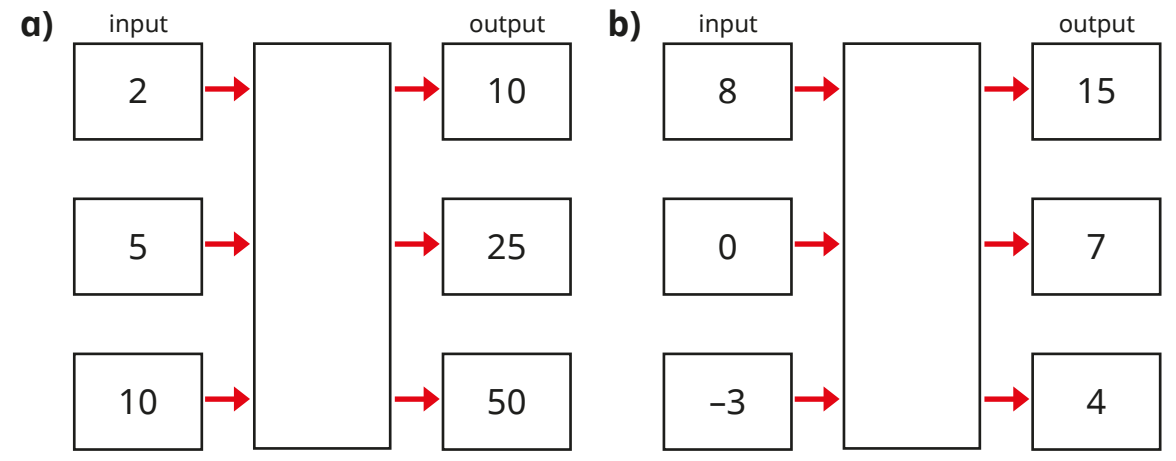
4 Calculate the inputs for the function machines.



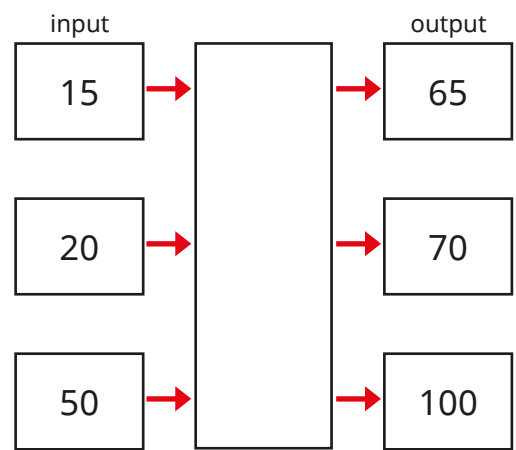
5 Complete the function machine.



6 Write the missing functions.

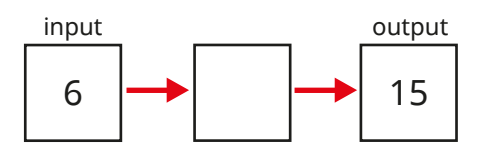


7 Here is a function machine.



- a) What is the output, if the input is zero?
- b) What is the input, if the output is zero?
- c) If the input is 0.5, what is the output?
- d) If the output is 1,000, what is the input?

8 Here is a function machine.



The rule is add 9

Dora

The rule is multiply by 2.5

Dexter

Who do you agree with? _____

Explain your answer.

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

input		output
3		12

Input	3	4	5	10	20	100
Output	12					

input		output
3		12

Input	3	4	5	10	20	100
Output	12					