

2-step function machines

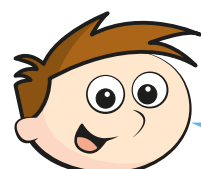
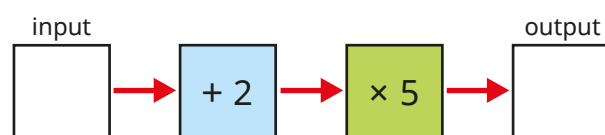
- 1 a) Use the function machine to complete the table.



Input	1	2	3	5	10	50
Output						

Here is another function machine.

The operations are the same, but in the reverse order.



Teddy

The outputs will be the same.



Jack

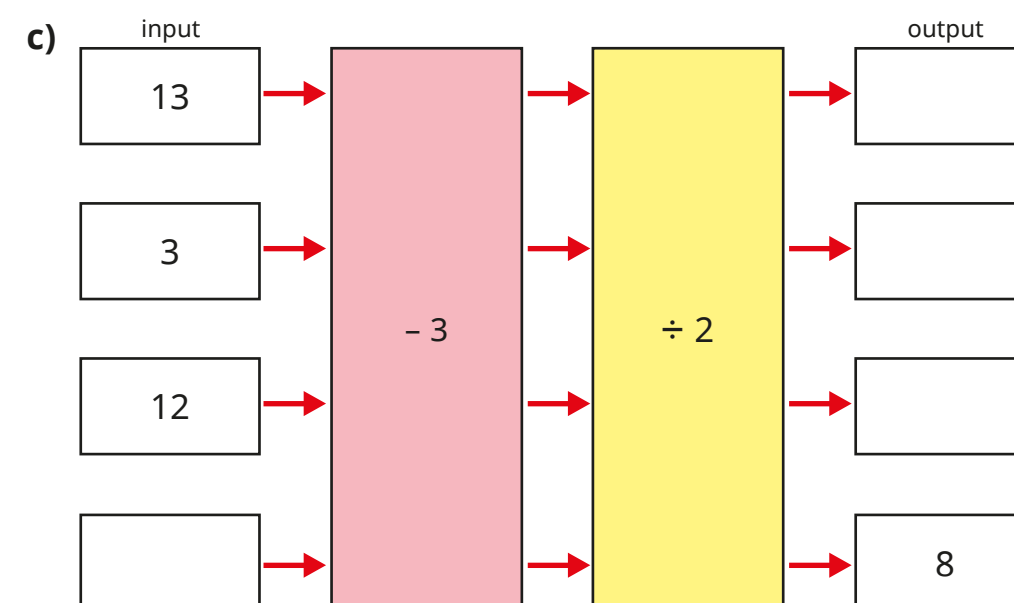
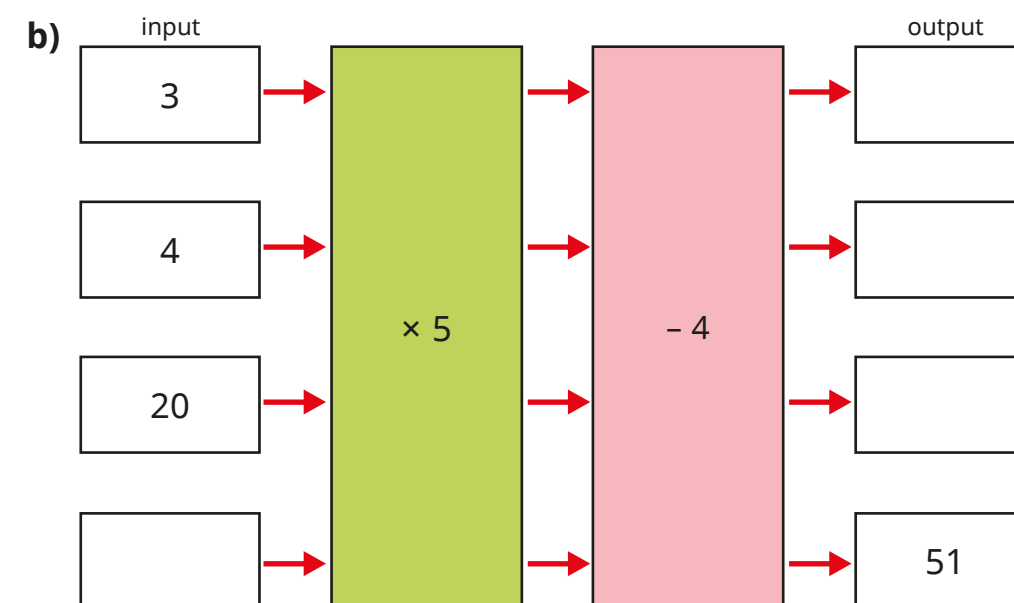
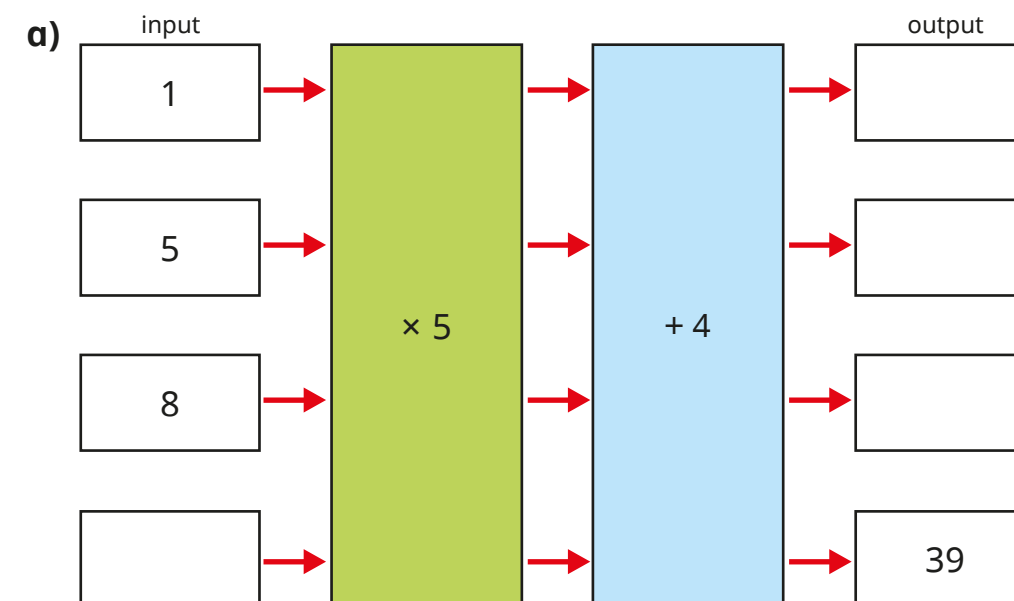
The outputs will be different.

- b) Explain to a partner who you think is correct.
c) Complete the table for the second function machine.

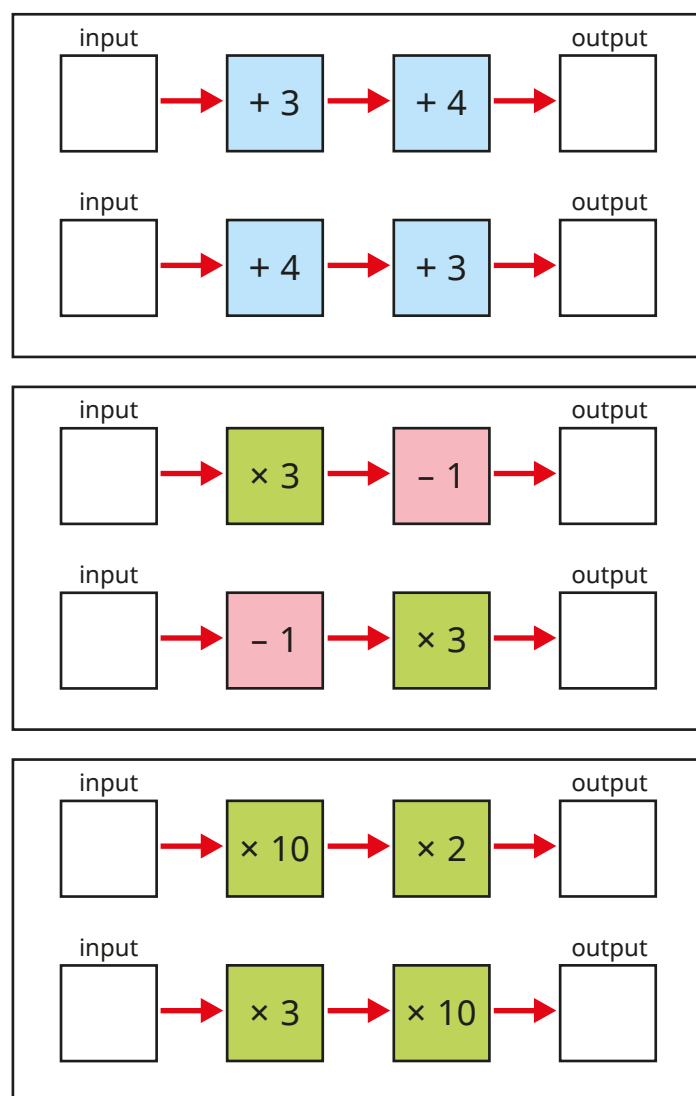
Input	1	2	3	5	10	50
Output						

- d) Who is correct?

- 2 Work out the missing outputs and inputs.

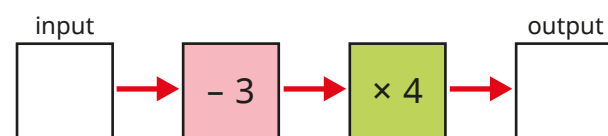


- 3 Tick the pairs of function machines that will give the same outputs for a given input.



Explain your reasoning to a partner.

- 4 Here is a function machine.



- a) Use the function machine to complete the table.

Input	10	3		
Output			40	280

- b) Rosie puts a number into the machine and she gets out the same number.

Work out Rosie's number.

- 5 Mr Hall and Mrs Rose order some photos online.

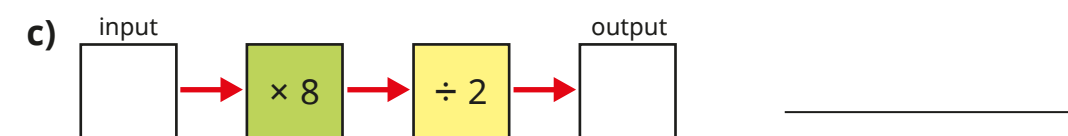
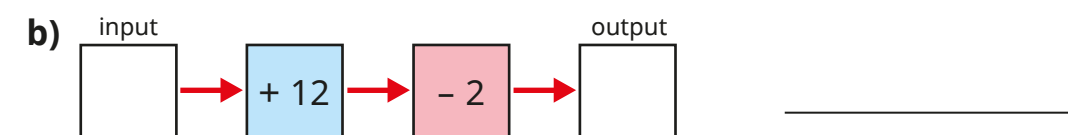
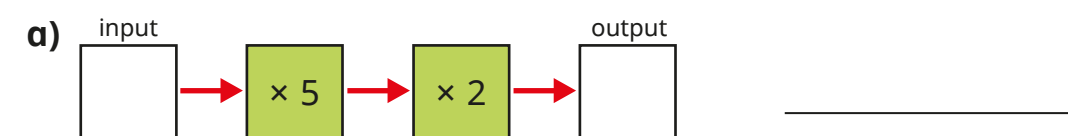


- a) Mr Hall orders 16 photos.
How much does he pay?

- b) Mrs Rose pays £6.05
How many photos did she order?

- 6 Here are some 2-step function machines.
For each machine, write a single step that would give the same output.

Check your answers by inputting values.



Can all 2-step function machines be written as a 1-step function machine? _____

Talk about it with a partner.