Flashback

A. 294 + 70 =

B. 4,697 + 2,534 =

C. 3 x 8 =

D. 564 x 8 =

E. 80 x 5 =

Flashback

(ANSWERS)

A. 294 + 70 = 364 *(M)*

B. 4,697 + 2,534 = 7,231 *(W)*

C. 3 x 8 = 24 *(M)*

D. 564 x 8 = 4,512 *(W)*

E. 80 x 5 = 400 *(M)*

Monday 22nd February 2021

LO: Find a rule – one step

Get ready questions

1) $12 \times \square = 84$

$12 + \square = 84$

2) $55 \div \square = 5$

$55 - \square = 5$

3) $\square \div 6 = 10$

$\square \div 6 = 20$

4) $\square \times 8 = 72$

$\square \times 9 = 72$

Dora is completing the table.

Number of dogs	1	2	3	4	5	10	60
Number of legs							

Dora is completing the table.

She's trying to find a rule to help her find the number of legs 60 dogs would have altogether.

Number of dogs	1	2	3	4	5	10	60
Number of legs	4	8	12	16	20		

Dora is completing the table.

She's trying to find a rule to help her find the number of legs 60 dogs would have altogether.

Number of dogs	1	2	3	4	5	10	60
Number of legs	4	8	12	16	20	24	

Dora is completing the table.

She's trying to find a rule to help her find the number of legs 60 dogs would have altogether.

Number of dogs	1	2	3	4	5	10	60
Number of legs	4	8	12	16	20		

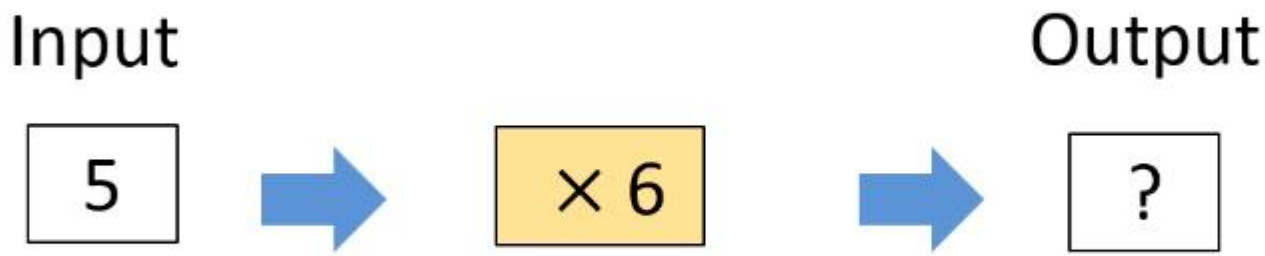
×4 ×4 ×4 ×4 ×4

Dora is completing the table.

She's trying to find a rule to help her find the number of legs 60 dogs would have altogether.

Number of dogs	1	2	3	4	5	10	60
	×4	×4	×4	×4	×4	×4	×4
Number of legs	4	8	12	16	20	40	240

Can you help her?


Input
5
× 6
Output
?

Input				Output
5	→	× 6	→	30
27	→	+ 9	→	?
?	→	− 3	→	46

Have a think

I'm thinking of a rule.
Give me a number!

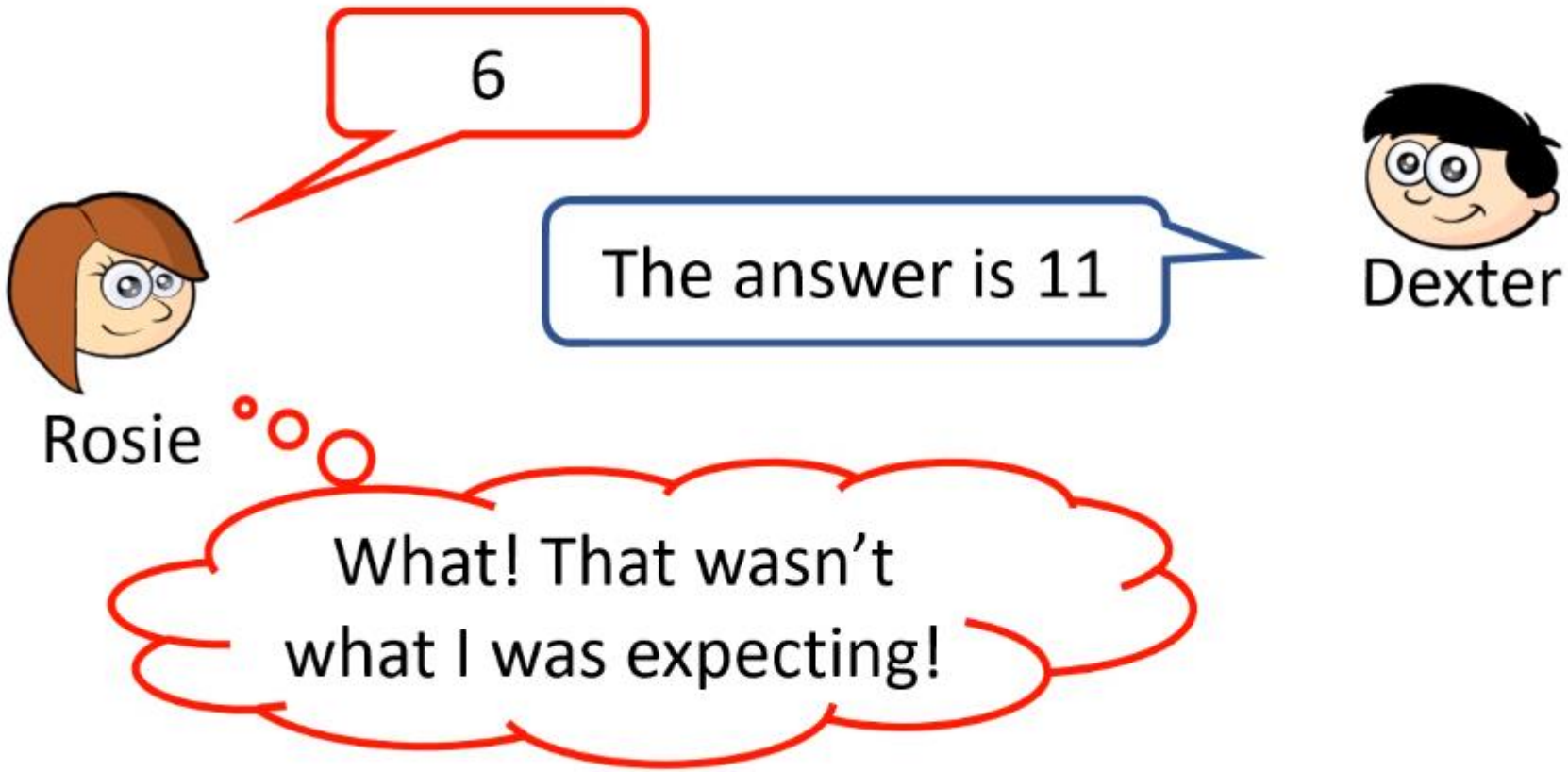
Dexter

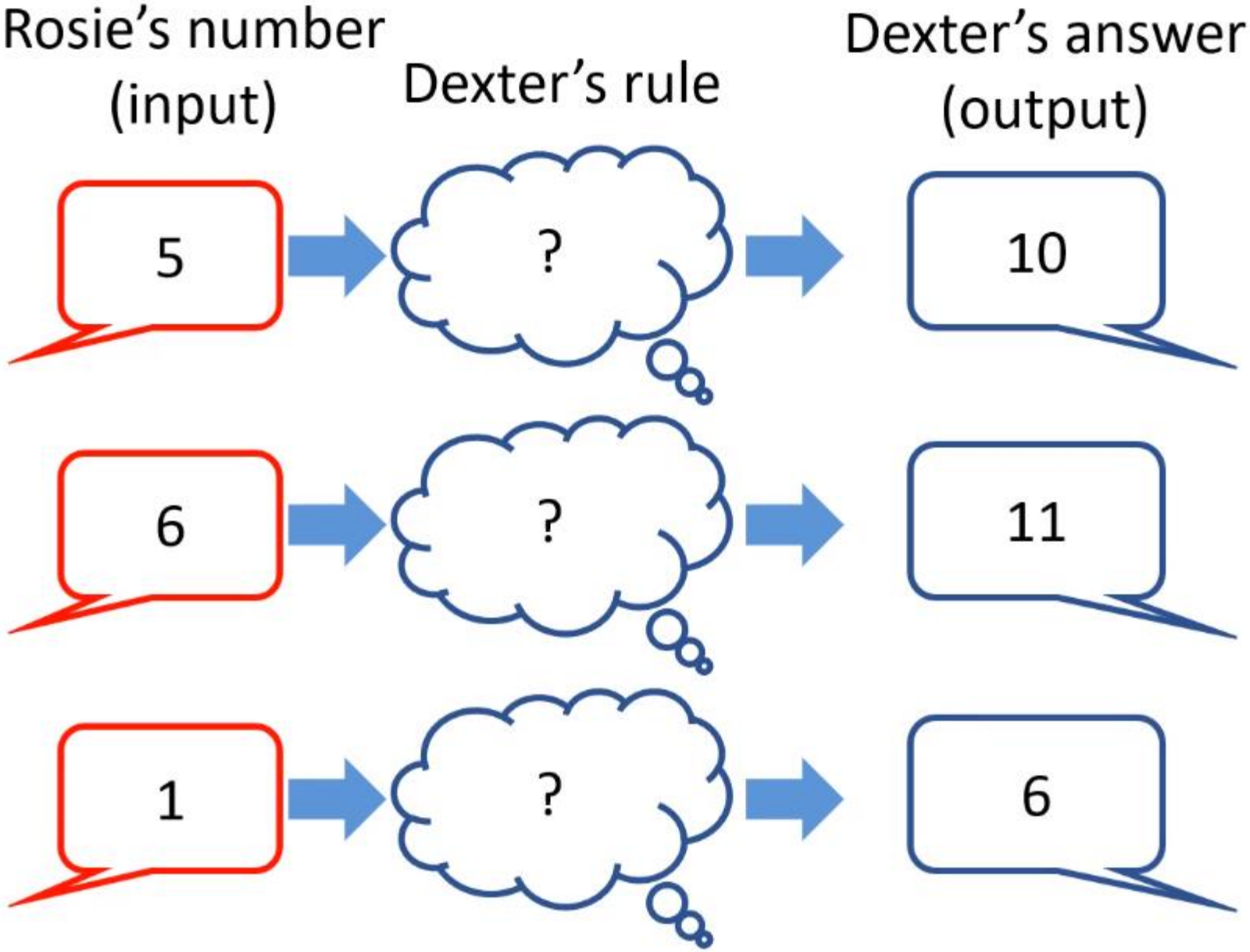
5

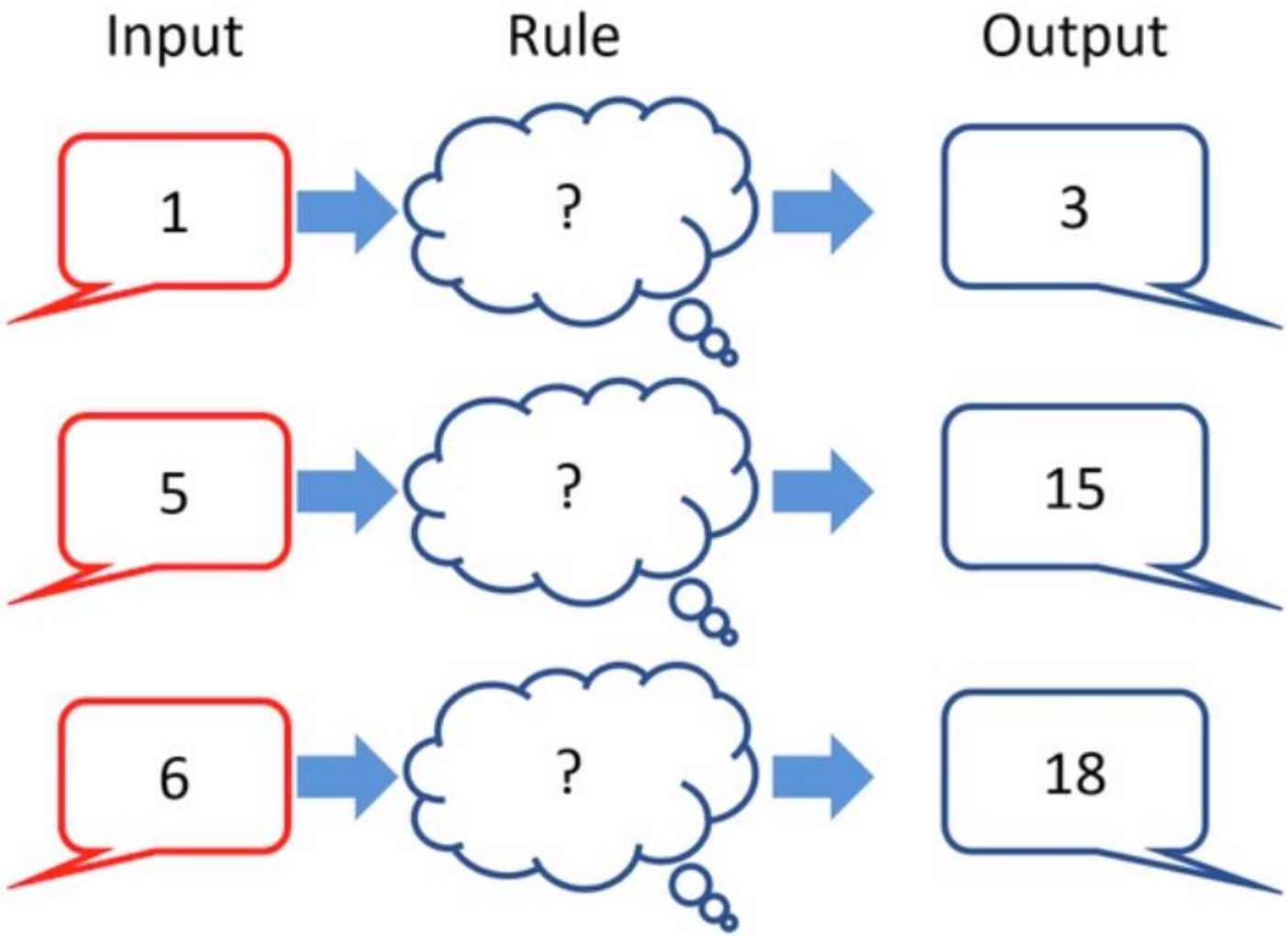
Rosie

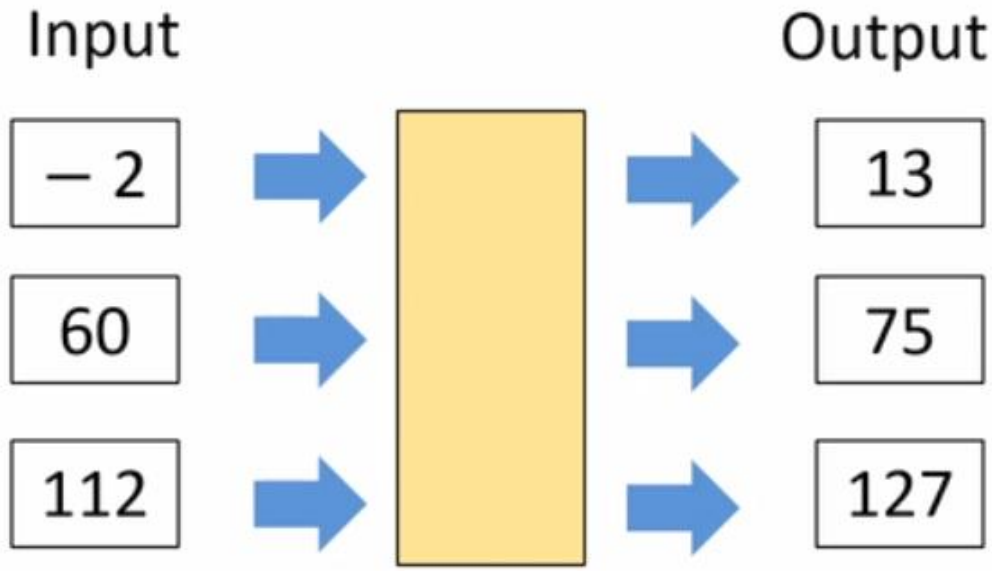
OK, the answer is 10

I wonder if he's doubling it. Let's try another!

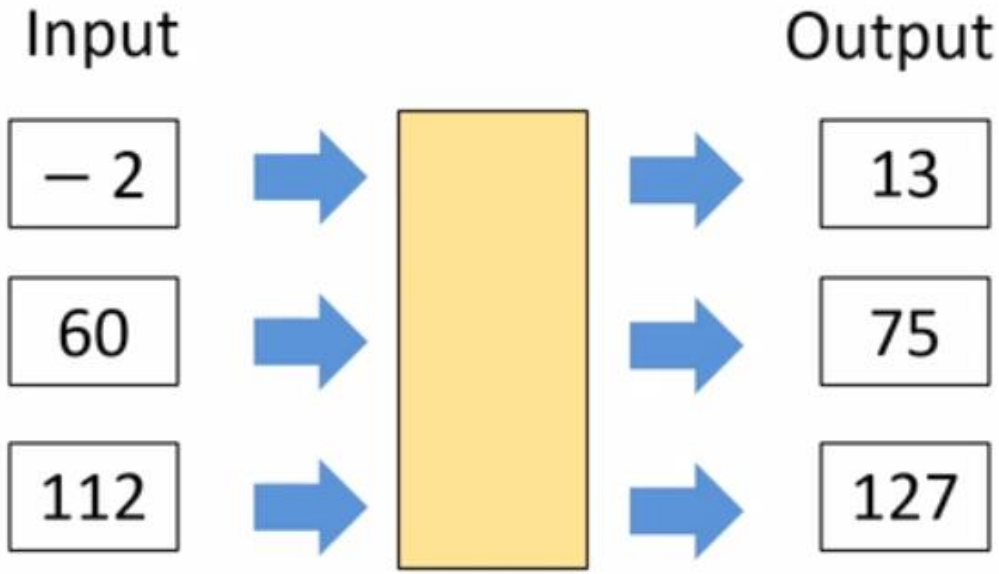

6
Rosie
The answer is 11
Dexter
What! That wasn't what I was expecting!


Rosie's number
(input)
Dexter's rule
Dexter's answer
(output)
5
?
10
6
?
11
1
?
6


Input
Rule
Output
1
?
3
5
?
15
6
?
18



Have a think



What is the input if the output is 32?

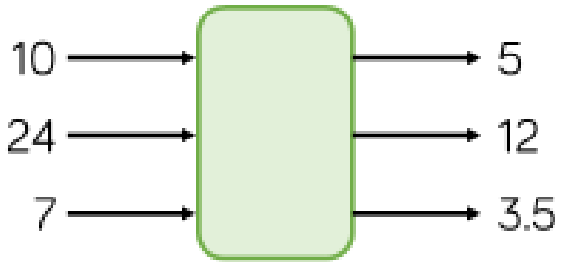
Have a think

Input		Output
5	→ ▭ →	15

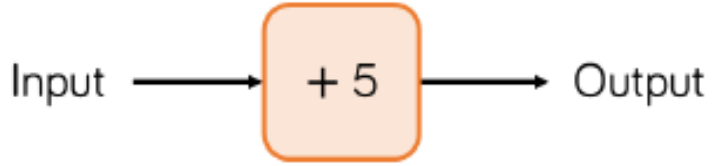
Have a think

A

1. Find the missing function.



2. Complete the table for the function machine.

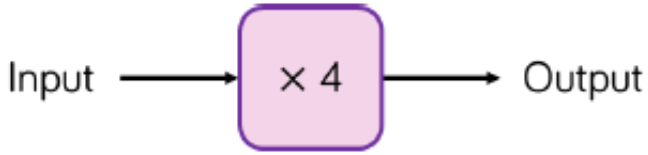


Input	5	5.8	10	– 3	– 8			
Output						9	169	0

3. Now make a function machine of your own? Remember it needs to have an input, function (or rule) and an output.

B

1. Here is a function machine.



- What is the output if the input is 2?
- What is the output if the input is 7.2?
- What is the input if the output was 20?
- What is the input if the output was 22?

2. Eva has a one-step function machine.
She puts in the number 6 and the number 18 comes out.

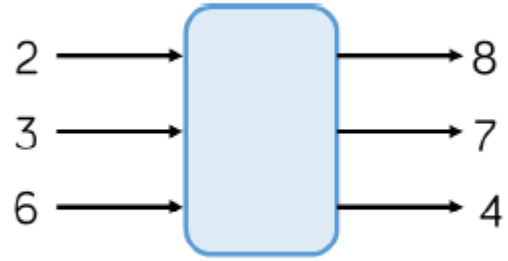
What could the function be?
How many different answers can you find?

3. What do you think ‘one step function means’? Explain using an example if you wish.

4. What examples of functions do you know?

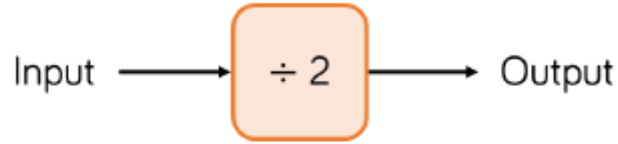
C

1. Amir puts some numbers into a function machine.



What is the output from the function when the input is 16?

2. Dora puts a number into the function machine.



Dora's number is:
- A factor of 32
- A multiple of 8
- A square number

What is Dora's input?
What is her output?

3. Can you now design a new function machine that can have more than one function/rule for the same input and output?

4. How many sets of inputs and outputs do you need to be able to work out the function? Explain how you know.