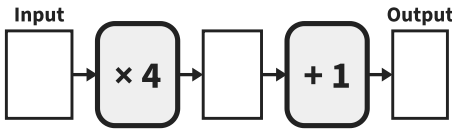
Function Machines

1

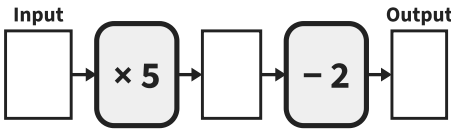
Complete the table.



Input	after × 4	Output
2	8	9
5		
9		

2

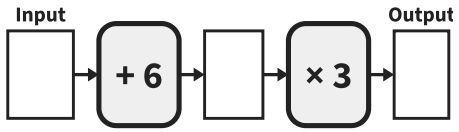
Complete the table.



Input	after × 5	Output
3	15	
6		
10		

3

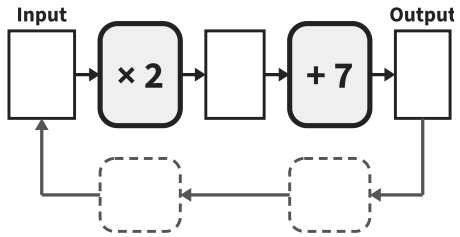
Complete the table.



Input	after + 6	Output
1		
4		
8		

4 *Notice the change!*

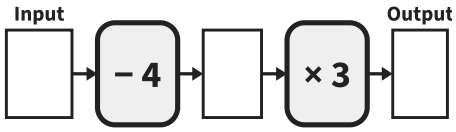
Work backwards to find each input.



Input	after × 2	Output
		15
		27
		41

5

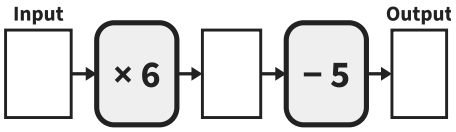
Complete the table.



Input	after − 4	Output
5		
9		
		36

6 *Notice the change!*

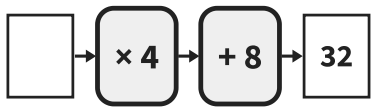
Complete the table.



Input	after × 6	Output
2		
7		
x		

7

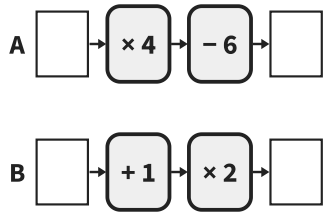
The output of this machine is 32.
Kai works backwards: 32 ÷ 4 = 8, then 8 − 8 = 0. Explain his mistake.
Find the input.



Input _____

8

The same number goes into machine A and machine B. Both give the same output. Find the number.

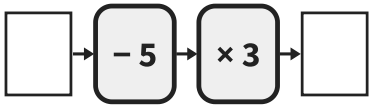


Number _____

Function Machines *further practice*

9

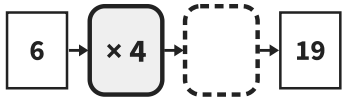
Find the output when the input is 4, and when the input is x.



Outputs _____

10

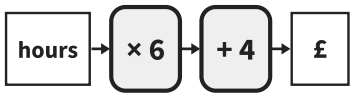
Find the missing step.



Missing step _____

11

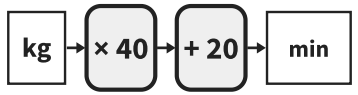
A climbing wall charges £6 for each hour, plus £4 to hire shoes. Mo pays £28 with shoe hire. How many hours did Mo climb for?



Hours _____

12

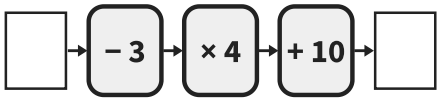
A chicken roasts for 40 minutes for each kg, then 20 minutes more. a) How long for a 1.5 kg chicken? b) A chicken takes 2 hours. How heavy is it?



Answers _____

13

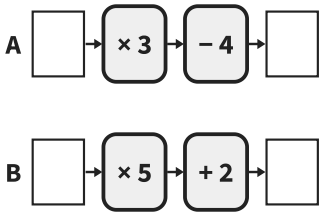
Ellie thinks of a number. She subtracts 3, multiplies by 4, then adds 10.
Her answer is 50. What was her number?



Number _____

14

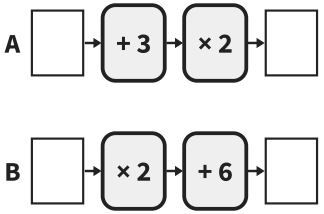
The same number goes into both machines and gives the same output.
Find the number and the output.



Number, output _____

15

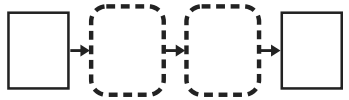
Show that these machines give the same output for every input.



So _____

16

A machine multiplies, then adds.
It turns 3 into 17, and 5 into 27.
Find the two steps.
Explain how you know.



Steps _____