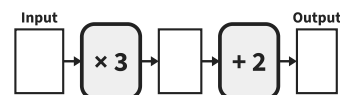


1

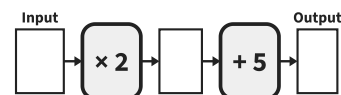
Complete the table.



Input	after $\times 3$	Output
4	12	14
7	21	23
10	30	32

2

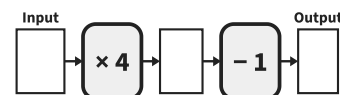
Complete the table.



Input	after $\times 2$	Output
3	6	11
6	12	17
9	18	23

3

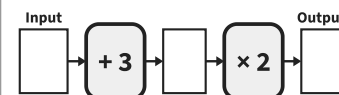
Complete the table.



Input	after $\times 4$	Output
2	8	7
5	20	19
8	32	31

4

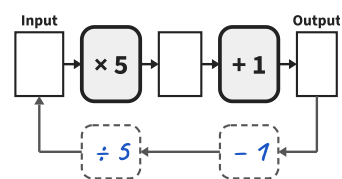
Complete the table.



Input	after $+ 3$	Output
1	4	8
4	7	14
10	13	26

5 Notice the change!

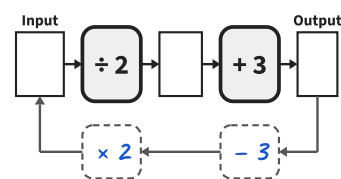
Work backwards to find each input.



Input	after $\times 5$	Output
2	10	11
4	20	21
7	35	36

6

Work backwards to find each input.



Input	after $\div 2$	Output
8	4	7
12	6	9
20	10	13

7

Notice the change!

Complete the table.



Input	Output
5	17
12	45
n	$4n - 3$

8

Complete the table.

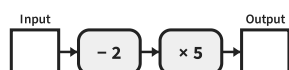


Input	Output
3	16
10	30
n	$2(n + 5)$

Function Machines further practice

9

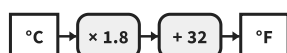
Find the output when the input is 6, and when the input is n .



Input 6 20
Input n $5(n - 2)$

10

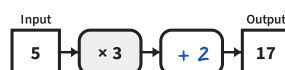
This machine changes a temperature in $^{\circ}\text{C}$ into $^{\circ}\text{F}$. Change 25°C into $^{\circ}\text{F}$.



$25 \times 1.8 = 45, 45 + 32$
Answer 77°F

11

Find the missing step.



$5 \times 3 = 15, \text{ and } 15 \rightarrow 17$
Missing step $+ 2$

12

To hire a bike costs £4 for each hour, plus £6 for a helmet. Ola pays £26 altogether. For how many hours did she hire the bike?



$26 - 6 = 20, 20 \div 4$
Answer 5 hours

13

Sara thinks of a number. She adds 4, then multiplies by 3, then subtracts 5. Her answer is 31. What number did she think of?

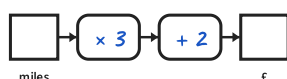


$31 + 5 = 36, 36 \div 3 = 12, 12 - 4$
Answer 8

14

This machine works out a taxi fare. It multiplies by a number and then adds a number. Find the two steps. How much is a 10 mile journey?

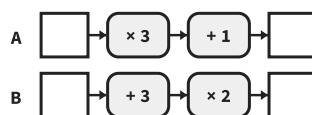
miles	1	2	3
cost (£)	5	8	11



Steps $\times 3, \text{ then } + 2$
10 miles $\pounds 32$

15

Lin puts the same number into machine A and machine B. She gets the same output from both. What number did she put in?



try 5: A gives 16 and B gives 16
Answer 5

16

Jo says that $+ 4$ then $\times 3$ gives the same output as $\times 3$ then $+ 4$. Is Jo right? Explain.

input 1: $(1 + 4) \times 3 = 15$
but $1 \times 3 + 4 = 7$
Answer No