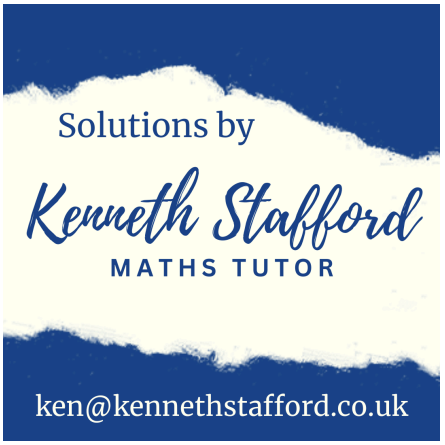
Name: SOLUTIONS

GCSE (1 - 9)

Function Machines





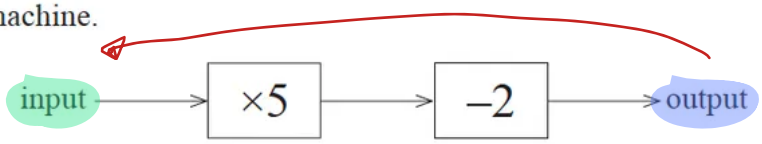
These questions are compiled from *released* Pearson Edexcel GCSE maths exam papers
They contain exam questions from up until the ***Summer 2023*** exam series
More recent exam papers do exist but are withheld for mock exams
As new exam papers are released these worksheets will gradually be updated
The ***most current*** version of these worksheets will always be available at: kennethstafford.co.uk

Question	Where the question appeared
1	Edexcel, GCSE, Autumn 2018, Paper 2F, Q10
2	Edexcel, GCSE, Autumn 2019, Paper 2F, Q8
3	Edexcel, GCSE, Autumn 2020, Paper 1F, Q12
4	Edexcel, GCSE, Summer 2022, Paper 2F, Q12

Function Machines (Questions from Edexcel GCSE Past Papers)

1

Here is a number machine.



(a) Work out the **output** when the input is 8

8 x 5 – 2 = 38

.....

(1)

(b) Work out the **input** when the output is 28

(28 + 2) ÷ 5 = 30 ÷ 5 = 6

.....

(2)

(Total for Question 10 is 3 marks)

[Edexcel, GCSE, Autumn 2018, Paper 2F, Q10]

2

Here is a number machine.



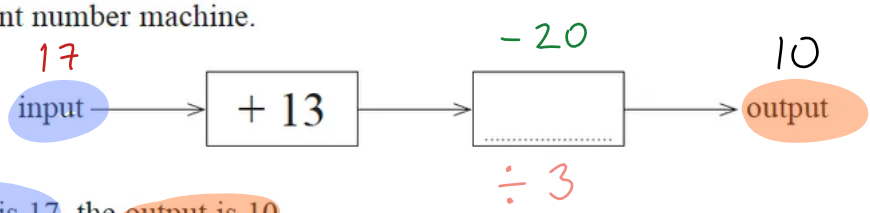
(a) Work out the output when the input is 6

6 × 8 − 5 = 43

.....

(1)

Here is a different number machine.



When the input is 17, the output is 10

(b) Complete the number machine.

17 + 13 = 30

(1)

(Total for Question 8 is 2 marks)

[Edexcel, GCSE, Autumn 2019, Paper 2F, Q8]

3

The diagram shows a number machine.



(a) Find the output when the input is 7

$7 \times 2 - 3 = 14 - 3 = 11$

(1)

(b) Find the input when the output is 41

$(41 + 3) \div 2 = 44 \div 2$

$= 22$

(2)

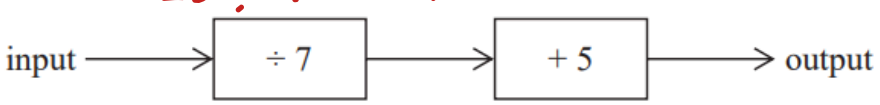
(Total for Question 12 is 3 marks)

[Edexcel, GCSE, Autumn 2020, Paper 1F, Q12]

4

Here is a number machine.

28 ÷ 7 = 4



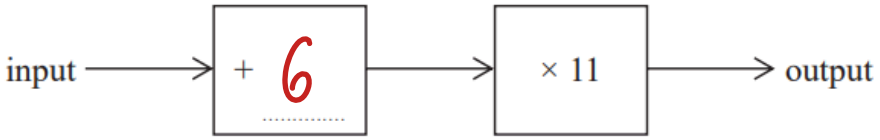
4 + 5 = 9

(a) Work out the output when the input is 28

9

(1)

Here is a different number machine.
The number machine is not complete.



When the input is 8, the output is 154

(b) Complete the number machine.

154 ÷ 11 = 14

14 - 6 = 8

(2)

(Total for Question 12 is 3 marks)

[Edexcel, GCSE, Summer 2022, Paper 2F, Q12]