

Function Machines and Flow Charts

June 2024 Paper 1

9 Here is a number machine.



(a) Work out the output when the input is 13

.....
(1)

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

.....
(2)

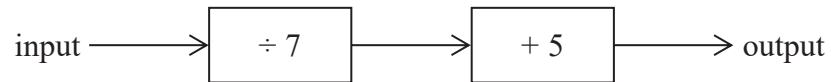
(c) Show that there is a number for which the output is the same as the input.

(2)

(Total for Question 9 is 5 marks)

June 2022 Paper 2

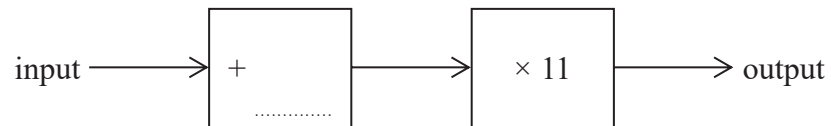
12 Here is a number machine.



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

.....
(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.

(2)

(Total for Question 12 is 3 marks)

June 2020 Paper 1

12 The diagram shows a number machine.



(a) Find the output when the input is 7

.....
(1)

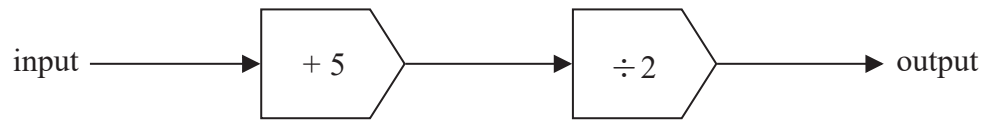
(b) Find the input when the output is 41

.....
(2)

(Total for Question 12 is 3 marks)

November 2024 Paper 1

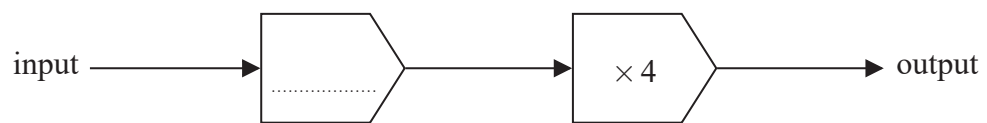
13 Here is a number machine.



(a) Find the output when the input is 11

.....
(2)

Here is a different number machine.



When the input is 10, the output is 28

(b) Complete this number machine.

(2)

(Total for Question 13 is 4 marks)