Q1.   Here is a table for a two-stage number machine.
The machine multiplies by 2 and then subtracts 3.

Complete the table.

Input $\rightarrow$ | $\times 2$ | $\rightarrow$ | -3 | $\rightarrow$ Output

Input	Output
2	1
4	5
10	....
....	27

(Total 3 marks)

M1.

Working	Answer	Mark	Additional Guidance
$(27 + 3) \div 2$	17 15	3	**B1** for output 17 **M1** for $(27 + 3) \div 2$ or $\leftarrow \div 2 \leftarrow + 3$ seen **A1** for input 15 SC: **B1** for input of 60 or 12 or 16.5
			Total for Question: 3 marks

E1. This question was answered well by many candidates. Most were able to calculate the output 17, and just over half were able to find the input 15. A very popular method to find the unknown input value was to use trial and improvement. Some of those candidates who adopted this approach and who arrived at the correct equation 15 × 2 – 3 = 27, did not then transfer the15 to the answer line. Common incorrect answers here were 12, 16, 60 and 30.