5 (a) Complete the table of values for  $y = e^{3x-2}$  giving your answers to 2 decimal places.

x	0	0.25	0.5	0.75	1
у	0.14				2.72

(2)

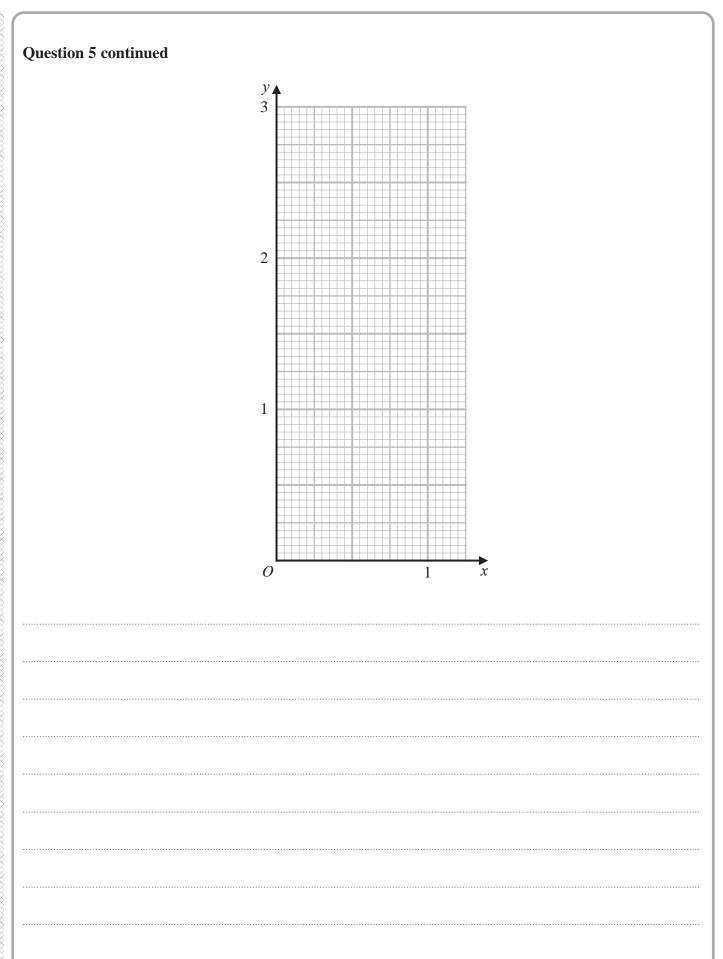
(b) On the grid opposite, draw the graph of  $y = e^{3x-2}$  for  $0 \le x \le 1$ 

(2)

(c) By drawing a suitable straight line on the grid, obtain an estimate, to one decimal place, of the root of the equation  $3x = 2 + \ln(3 - x)$ 

(3)

•••••
• • • • • • • • • • • • • • • • • • • •
•••••





Turn over for a spare grid if you need to redraw your graph.

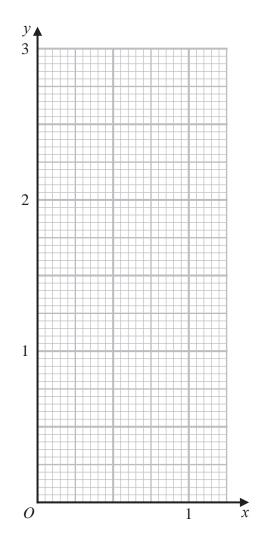
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 5 continued	

## **Question 5 continued**

Only use this grid if you need to redraw your graph.



(Total for Question 5 is 7 marks)

