8 (a) Complete the table of values for  $y = 2x + \frac{3}{x^2} - 3$  giving your answers to 2 decimal places where appropriate.

х	0.5	0.75	1	1.5	2	3	4	5
у	10		2				5.19	7.12

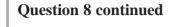
(2)

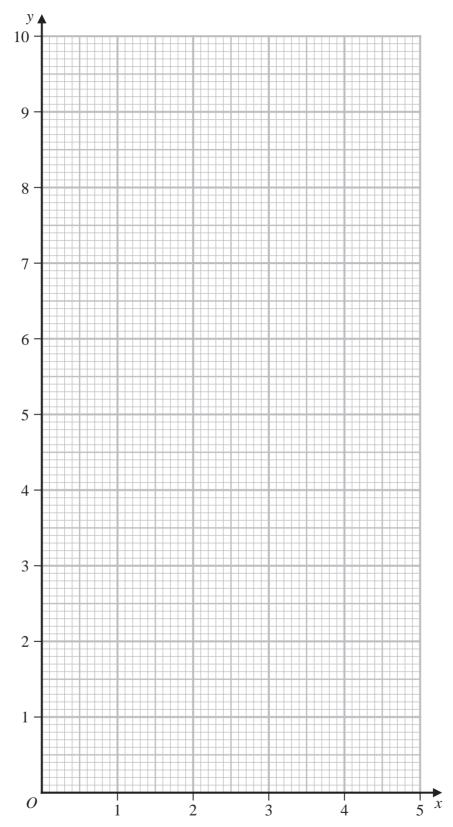
(b) On the grid opposite, draw the graph of  $y = 2x + \frac{3}{x^2} - 3$  for  $0.5 \le x \le 5$ 

(2)

(c) By drawing a suitable straight line on the grid, obtain estimates, to one decimal place, of the roots of the equation  $4x^3 - 10x^2 + 3 = 0$  for  $0.5 \le x \le 5$ 

(5)





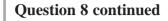
Turn over for a spare grid if you need to redraw your graph.

DO NOT WRITE IN THIS AREA

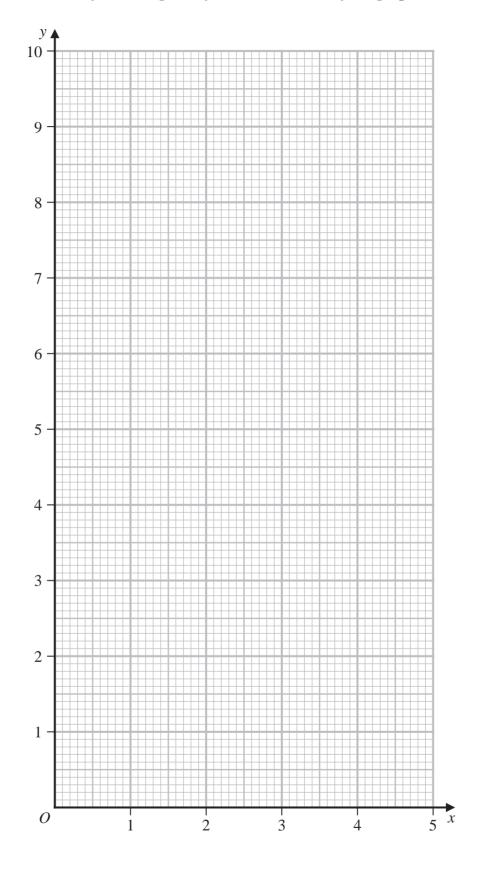
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 8 continued



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



(Total for Question 8 is 9 marks)