

7 The curve  $C$  has equation  $y = -\log_4(x + 4)$

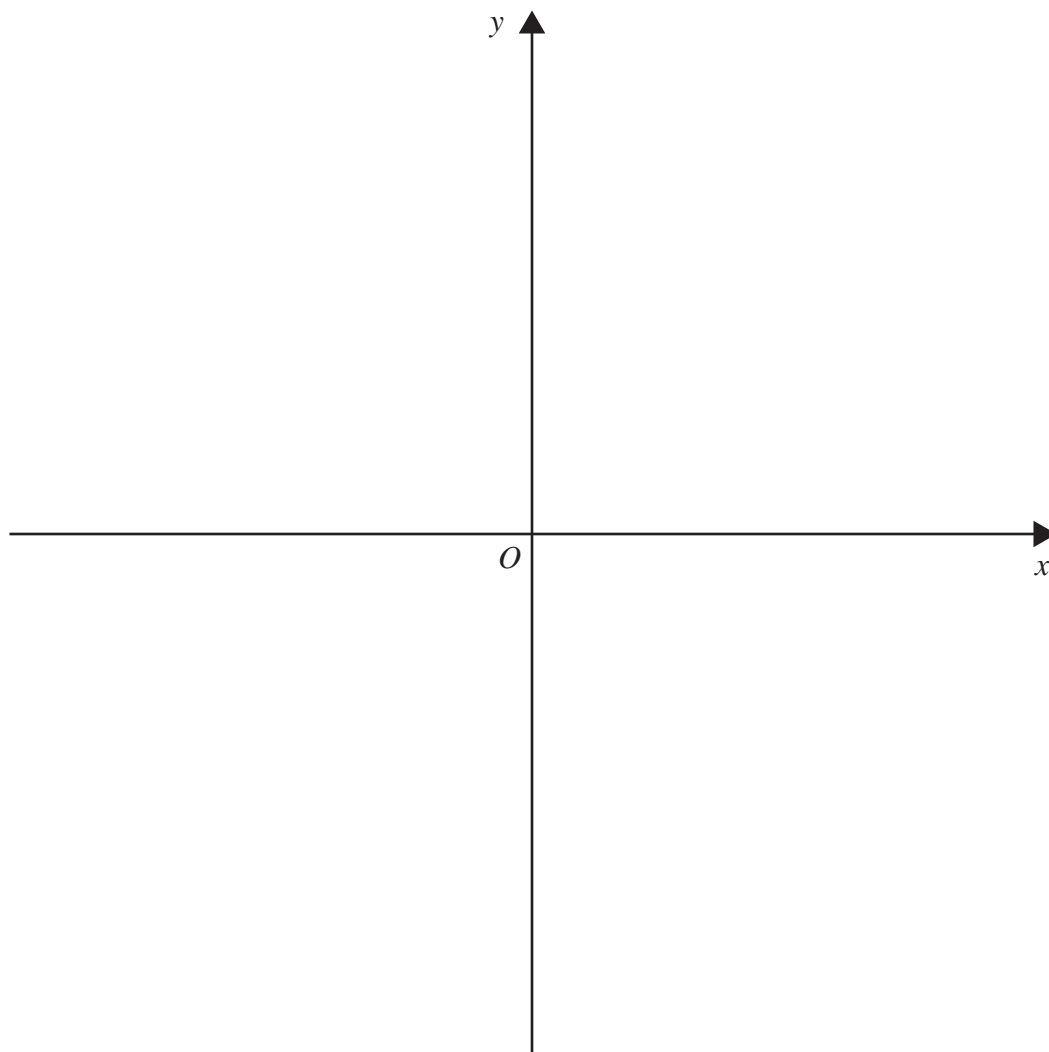
(a) Using the axes below, sketch the graph of  $C$ .

Label the coordinates of the points of intersection of  $C$  with the coordinate axes and the equation of any asymptote to  $C$ .

(4)

(b) Solve the equation  $\log_{(x+4)} 256 - \log_4(x + 4) = 0$

(5)



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**Question 7 continued**

Handwriting practice area with horizontal dotted lines.

**(Total for Question 7 is 9 marks)**



P 7 4 0 9 9 A 0 1 7 3 2