

3

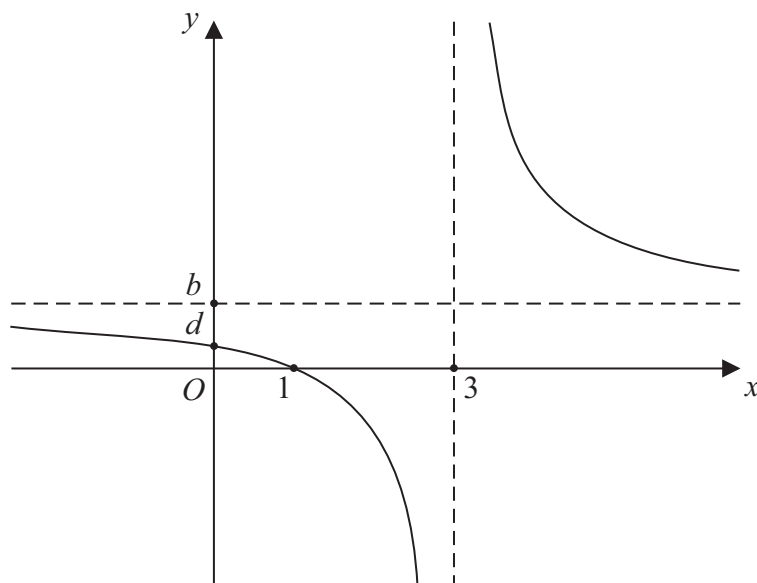


Figure 1

Figure 1 shows a sketch of the curve with equation $y = 1 + \frac{c}{x+a}$, where a and c are integers.

The equations of the asymptotes to the curve are $x = 3$ and $y = b$.

(a) Find the value of a and the value of b .

(2)

The curve crosses the x -axis at $(1, 0)$ and the y -axis at $(0, d)$.

(b) Find the value of c and the value of d .

(4)

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(Total for Question 3 is 6 marks)

