

7

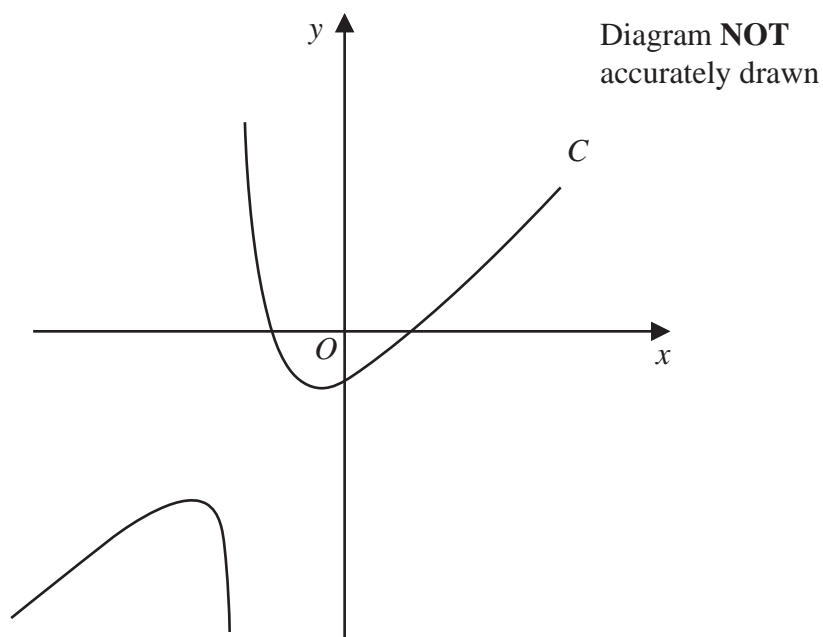
**Figure 2**

Figure 2 shows a sketch of part of the curve C with equation

$$y = \frac{x^2 - 1}{4x + 5} \quad \text{where } x \neq -\frac{5}{4}$$

- (a) Write down the equation of the asymptote to C that is parallel to the y -axis.

(1)

The line l is the normal to C at the point where $x = -1$

- (b) Find an equation of l

(7)

The line l meets C again at the point D

- (c) Find the coordinates of D

(6)

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Question 7 continued

Handwriting practice area with horizontal dotted lines.



Question 7 continued

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Question 7 continued

Handwriting practice area with horizontal dotted lines.

(Total for Question 7 is 14 marks)

