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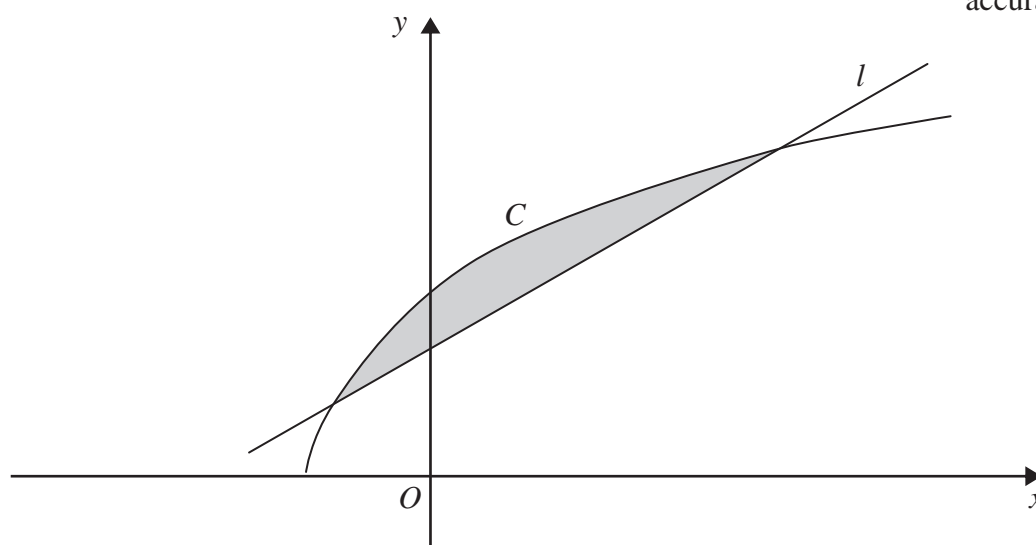
Diagram **NOT**
accurately drawn**Figure 3**

Figure 3 shows part of the curve C with equation $y = (2x + 3)^{\frac{1}{2}}$ and the line l with equation $2y = x + 3$.

The line l crosses C at two points.

- (a) Find the coordinates of each of these points.

(5)

The finite region bounded by C and l , shown shaded in Figure 3, is rotated through 360° about the x -axis.

- (b) Use algebraic integration to find, in terms of π , the volume of the solid generated.

(5)

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Question 9 continued

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Question 9 continued

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(Total for Question 9 is 10 marks)

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