

8 The line  $l$  has equation  $y + 7x = 15$  and the curve  $C$  has equation  $y = x^2 - 6x + 9$

(a) Use algebra to find the coordinates of the points where  $l$  intersects  $C$ .

(5)

(b) Use algebraic integration to find the exact area of the finite region bounded by  $l$  and  $C$ .

(5)

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**Question 8 continued**

Handwriting practice area with horizontal dotted lines.



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Question 8 continued

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**Question 8 continued****(Total for Question 8 is 10 marks)**

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