

DO NOT WRITE IN THIS AREA

Question 4 continued

Handwriting practice area with horizontal dotted lines.

(Total for Question 4 is 6 marks)



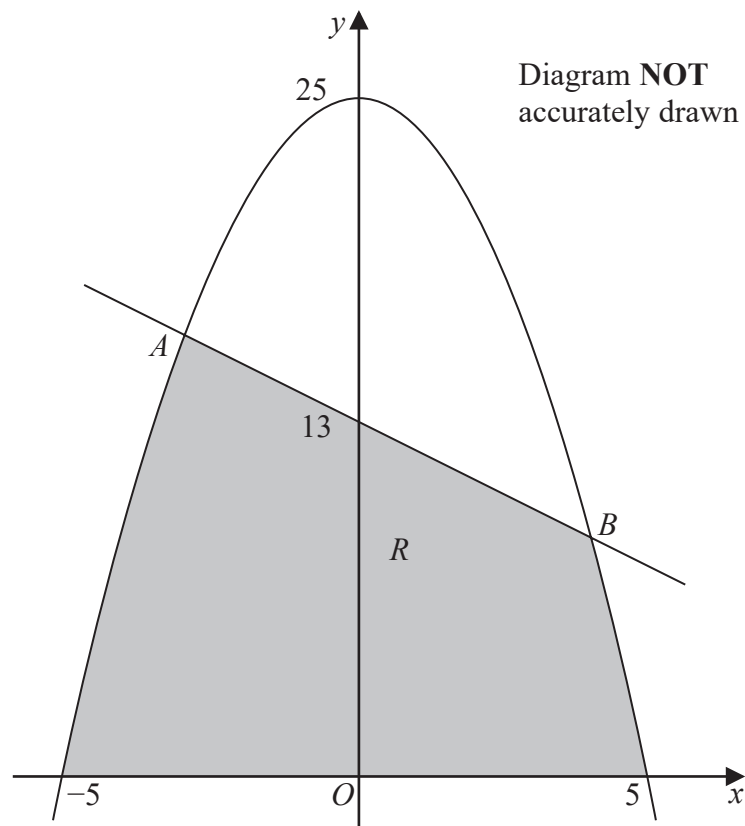


Figure 2

Figure 2 shows part of the curve with equation $y = 25 - x^2$ and part of the line with equation $y + x = 13$

The curve and the line intersect at the points A and B .

- (a) Use algebra to find the coordinates of A and the coordinates of B .

(4)

The region R , shown shaded in Figure 2, is bounded by the curve, the straight line and the x -axis.

- (b) Use algebraic integration to find the area of R .

(7)

