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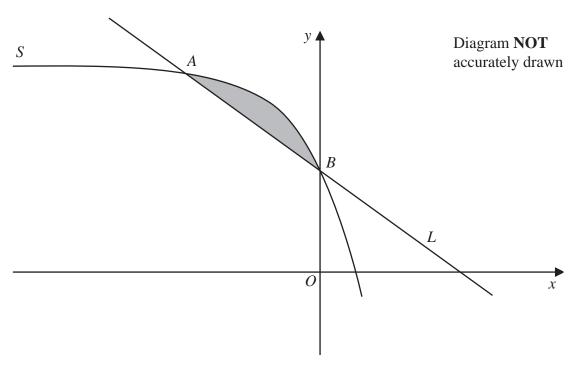


Figure 3

Figure 3 shows a sketch of part of the curve S with equation $y = -2e^{3x} + 4$ and the line L

The curve S has intersections with the line L at the points A and B with x coordinates x = -1 and x = 0 respectively.

The finite region bounded by S and L is shown shaded in Figure 3

Use calculus to find the exact area of this region.

Give your answer in the form $\frac{a + be^{-c}}{c}$ where a, b and c are integers to be found. (8)

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Question 9 continued	



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(Total for Question 9 is 8 marks)

