

7 (a) Solve $\log_a 1024 = 5$ (1)

(b) Solve $\log_3(6c + 9) = 4$ (2)

(c) Solve $2(\log_b 25 + \log_b 125) = 5$ (4)

(d) Solve the equations, giving the values of x and y to 3 significant figures,

$$3 \log_2 x + 4 \log_3 y = 10$$

$$\log_2 x - 2 \log_3 y = 1$$

(6)

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Question 7 continued

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(Total for Question 7 is 13 marks)

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