1. June/2023/Paper_9709/21/No.1

Use logarithms to solve the equation $12^x = 3^{2x+1}$. Give your answer correct to 3 significant figures. [4]

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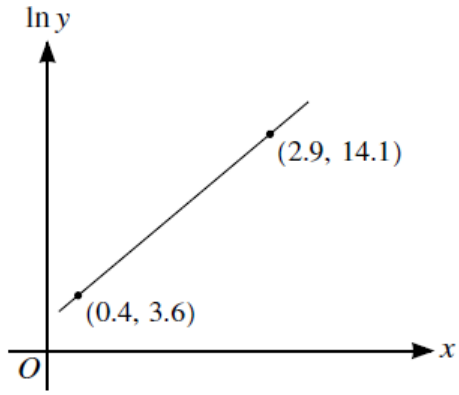
2. June/2023/Paper_9709/22/No.2



The variables x and y satisfy the equation $y = Ae^{(A-B)x}$, where A and B are constants. The graph of $\ln y$ against x is a straight line passing through the points (0.4, 3.6) and (2.9, 14.1), as shown in the diagram.

Find the values of A and B correct to 3 significant figures. [5]

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