7 Find the number of different ways the 9 letters of the word POLYMATHS can be arranged when

(a) the O and A are **not** next to each other [2]

(b) the letters MATHS are together in this order. [2]

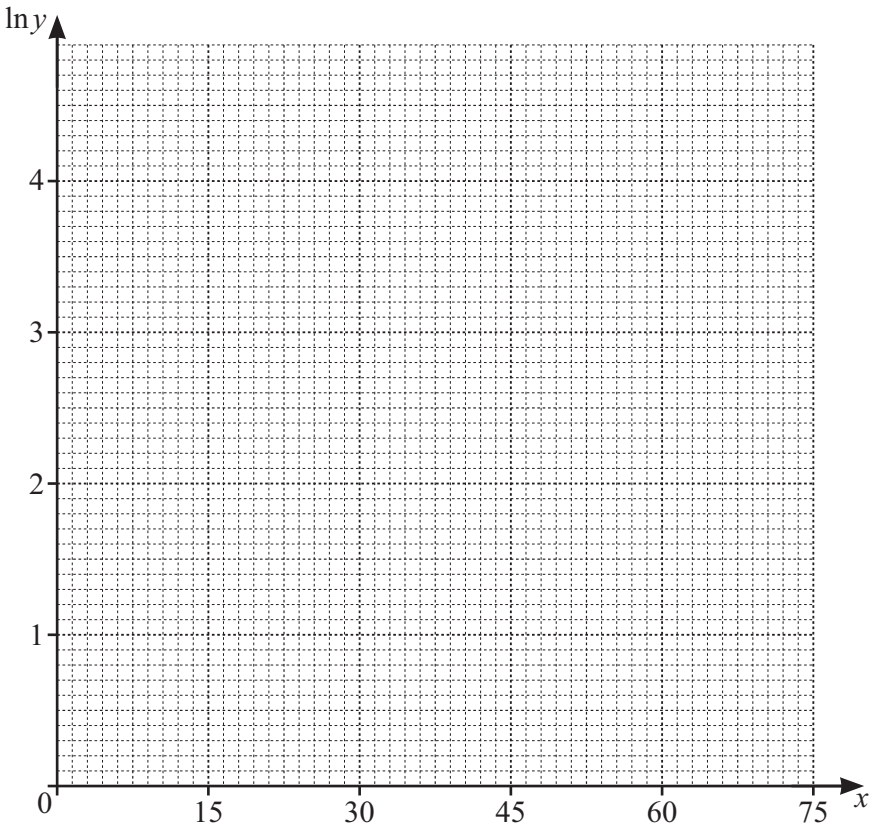
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8 An experiment was carried out and values of y for certain values of x were recorded. The table shows the values recorded.

x	15	30	45	60	75
y	10	13	22	35	50

The relationship between y and x is modelled by $y = Ae^{kx}$, where A and k are constants.

(a) Draw a straight line graph for $\ln y$ against x. [2]



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