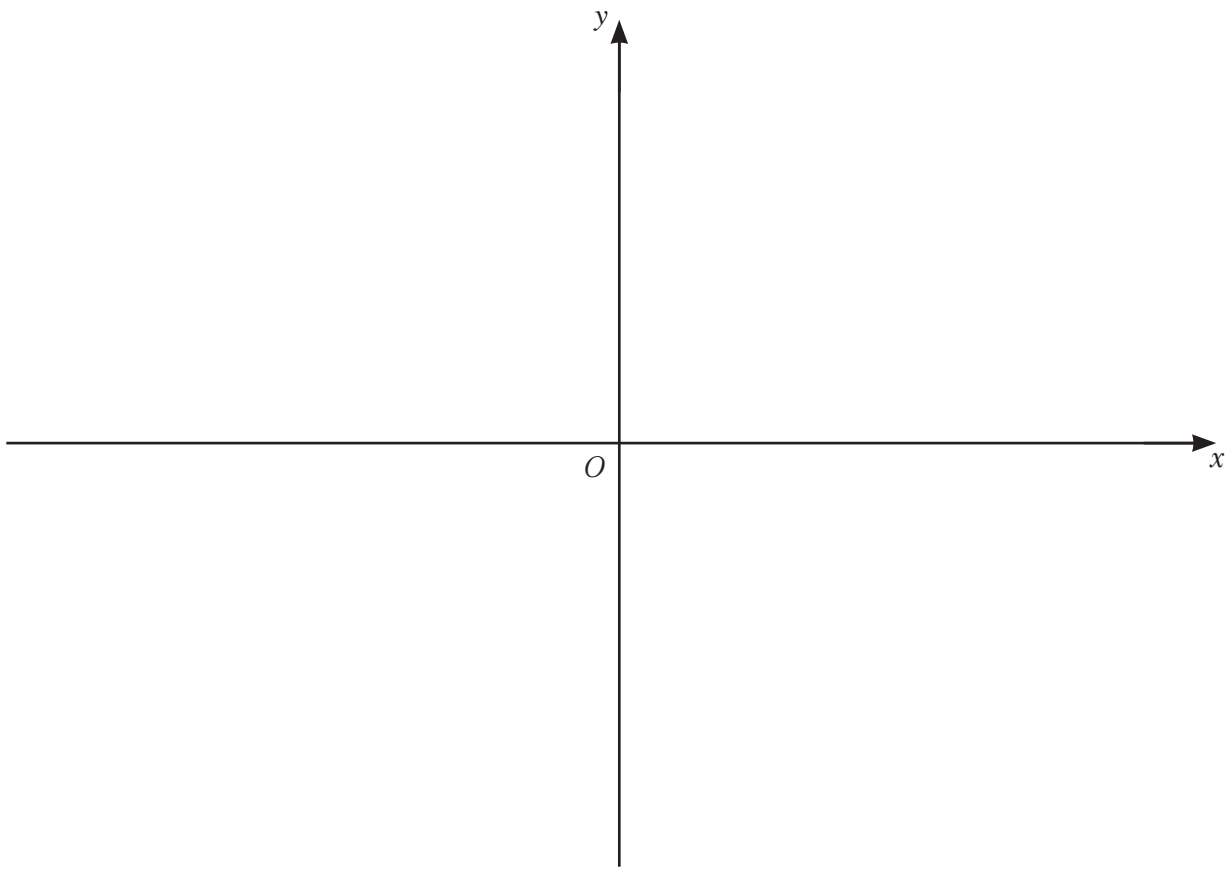
1 **(a)** On the axes below, sketch the graph of $y = (x-2)(x+1)(3-x)$, stating the intercepts on the coordinate axes.



[3]

(b) Hence write down the values of x such that $(x-2)(x+1)(3-x) > 0$. [2]

2 **(a)** Given that $y = \dfrac{e^{2x-3}}{x^2+1}$, find $\dfrac{dy}{dx}$. [3]

(b) Hence, given that y is increasing at the rate of 2 units per second, find the exact rate of change of x when $x = 2$. [3]

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