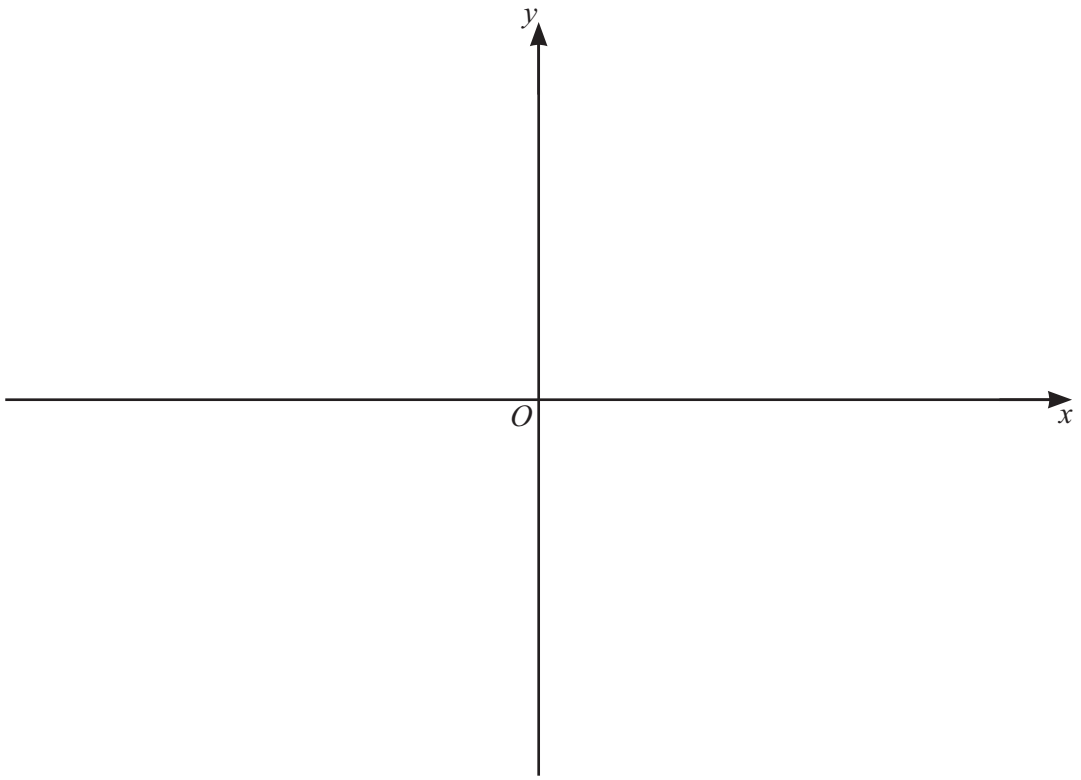
2 **(a)** Find the x-coordinates of the stationary points on the curve $y = \frac{1}{2}(3-2x)(x+2)^2$. [4]

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(b) On the axes, sketch the graph of $y = \frac{1}{2}(3-2x)(x+2)^2$ stating the intercepts with the coordinate axes. [3]



(c) Find the values of k for which the equation $\frac{1}{2}(3-2x)(x+2)^2 = k$ has three real and distinct roots. [2]

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3 Solve the equation $6x^{\frac{3}{5}} + 1 = \dfrac{12}{x^{\frac{3}{5}}}$, giving your answers correct to 2 decimal places. [4]

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