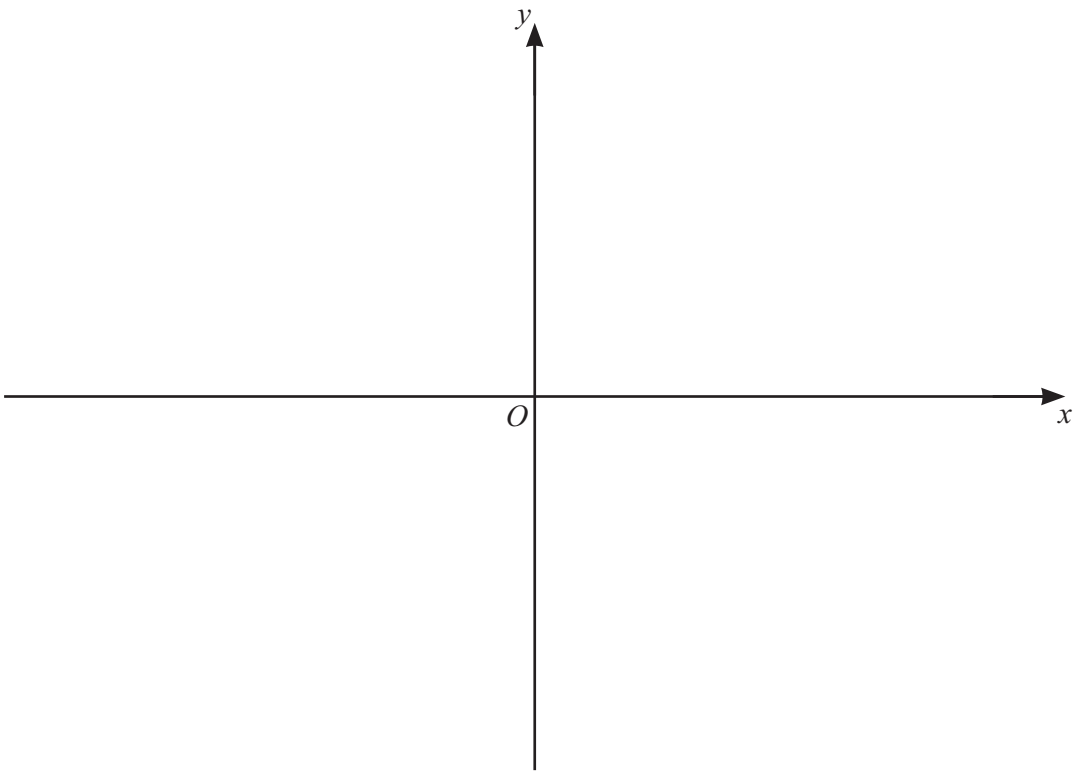
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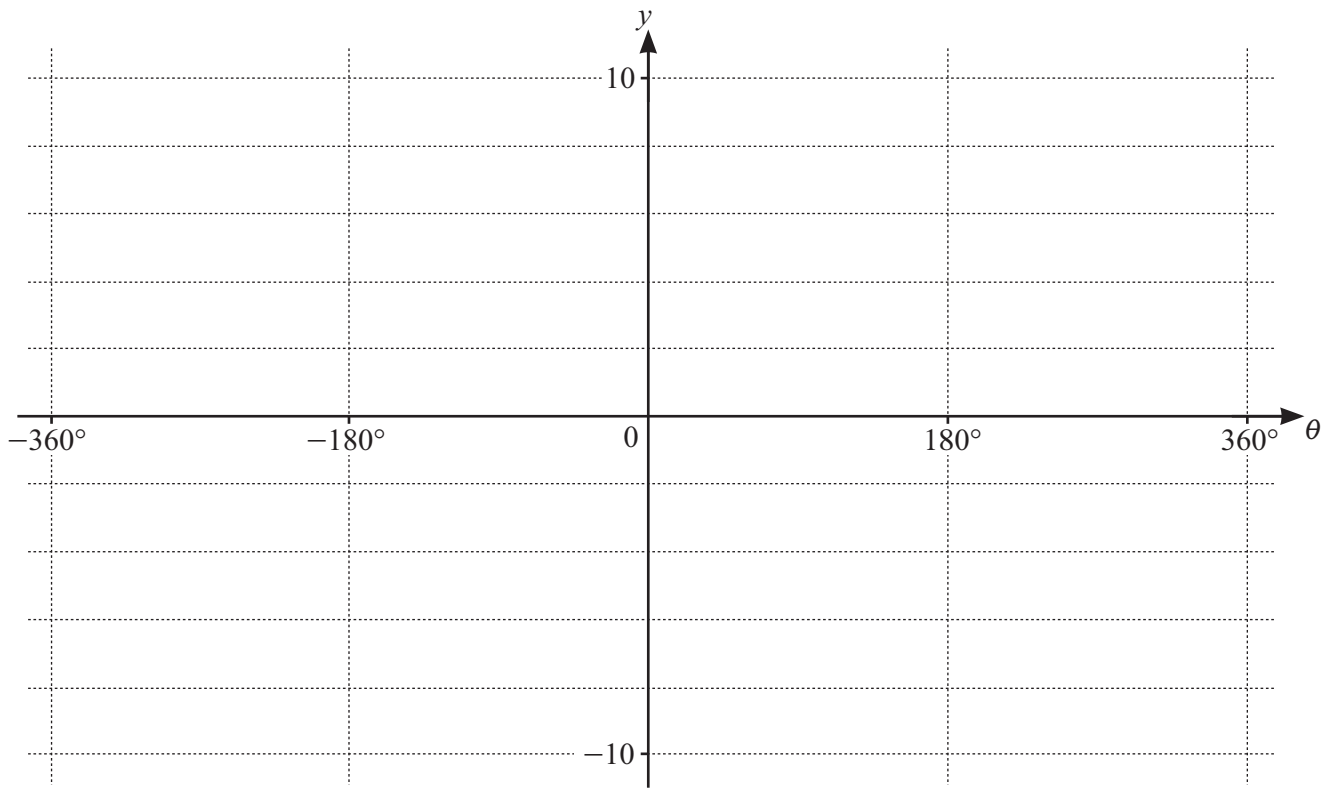
1 **(a)** Find the coordinates of the stationary point on the curve $y = (x+3)(x-4)$. [3]

(b) On the axes, sketch the graph of $y = |(x+3)(x-4)|$, stating the intercepts with the axes. [2]



(c) Given that $k > 0$, write down the values of k for which the equation $|(x+3)(x-4)| = k$ has exactly 2 distinct real roots. [1]

2 On the axes, sketch the graph of $y = 4 + 5\sin\frac{\theta}{2}$, for $-360° \leqslant \theta \leqslant 360°$. State the intercept with the y-axis. [4]



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