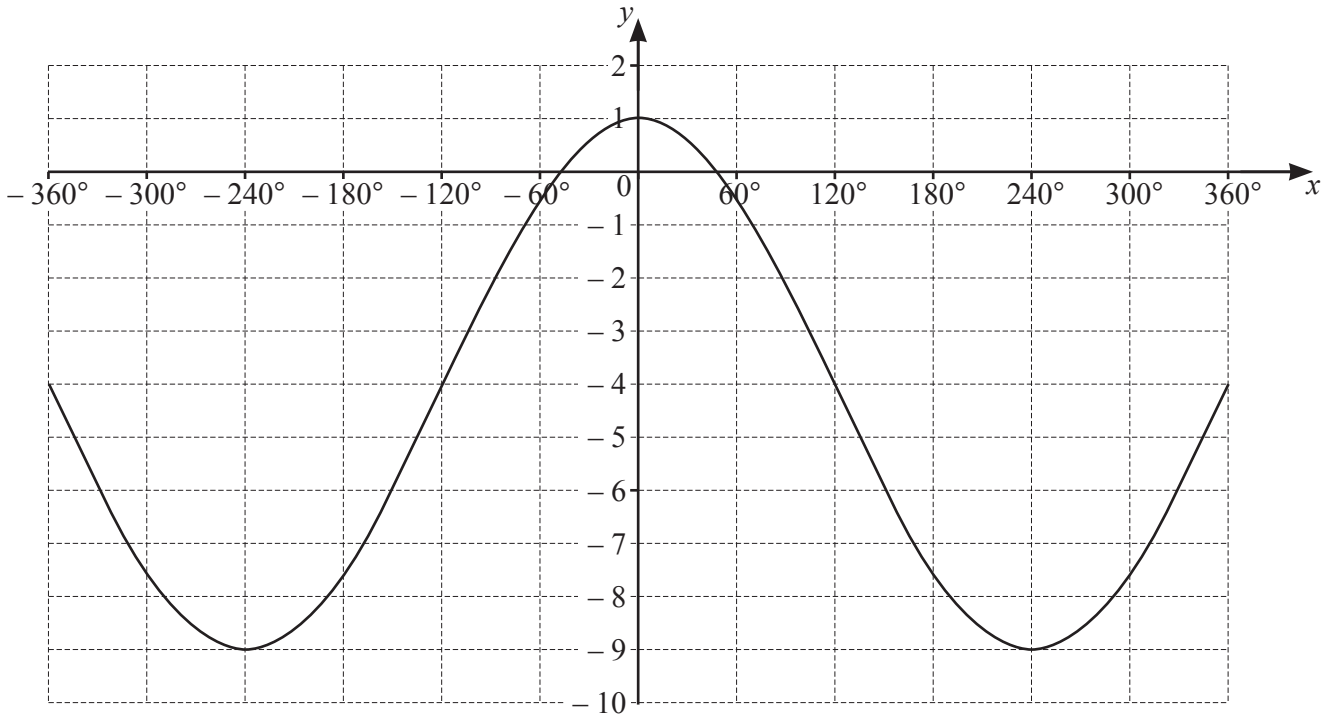
5 **(a)** The diagram shows the graph of $y = a\cos bx + c$, for $-360° \leqslant x \leqslant 360°$, where a, b and c are constants. Find the values of a, b and c. [3]



(b) The line $y = p$ is a tangent to the curve $y = 3 - 2\sin 6\theta$. Write down the possible values of p. [2]

6 Find $\int_2^4 \left(\frac{2}{2x-3} - \frac{3}{(3x-5)^2} \right) \mathrm{d}x$, giving your answer in exact form. [4]

7 Given that $2 + \cot\theta = 3x$ and $\sin\theta = \sqrt{y}$, find y in terms of x. [3]

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