

2 **(i)** Show that the equation $4 \sin^4 \theta + 5 = 7 \cos^2 \theta$ may be written in the form $4x^2 + 7x - 2 = 0$,
where $x = \sin^2 \theta$. [1]

(ii) Hence solve the equation $4 \sin^4 \theta + 5 = 7 \cos^2 \theta$, for $0^\circ \leq \theta \leq 360^\circ$. [4]