

- 4** (i) Show that the equation $\frac{4 \cos \theta}{\tan \theta} + 15 = 0$ can be expressed as

$$4 \sin^2 \theta - 15 \sin \theta - 4 = 0. \quad [3]$$

- (ii) Hence solve the equation $\frac{4 \cos \theta}{\tan \theta} + 15 = 0$ for $0^\circ \leq \theta \leq 360^\circ$. [3]