

- 7 (i) Solve the equation $2 \cos^2 \theta = 3 \sin \theta$, for $0^\circ \leq \theta \leq 360^\circ$. [4]
- (ii) The smallest positive solution of the equation $2 \cos^2(n\theta) = 3 \sin(n\theta)$, where n is a positive integer, is 10° . State the value of n and hence find the largest solution of this equation in the interval $0^\circ \leq \theta \leq 360^\circ$. [3]