

- 4** **(i)** Express the equation $3 \sin \theta = \cos \theta$ in the form $\tan \theta = k$ and solve the equation for $0^\circ < \theta < 180^\circ$.
[2]
- (ii)** Solve the equation $3 \sin^2 2x = \cos^2 2x$ for $0^\circ < x < 180^\circ$.
[4]