

- 4** (i) Sketch and label, on the same diagram, the graphs of $y = 2 \sin x$ and $y = \cos 2x$, for the interval $0 \leq x \leq \pi$. [4]
- (ii) Hence state the number of solutions of the equation $2 \sin x = \cos 2x$ in the interval $0 \leq x \leq \pi$. [1]