

Question 4

(25 marks)

(a) Find **all** the values of x for which $\cos(2x) = -\frac{\sqrt{3}}{2}$, where $0^\circ \leq x \leq 360^\circ$.

(b) Let $\cos A = \frac{y}{2}$, where $0^\circ < A < 90^\circ$. Write $\sin(2A)$ in terms of y .