

Solve the following trigonometric equations :

i) $2 \sin(2x) = \sin^2(x)$ for $0 \leq x < 360^\circ$ [5 marks]

ii) $6 \cos x - 4 \sin^2 x = 0$, $0 \leq x < 3\pi$ (radian) [6 marks]

Bonus :

Solve $4 \sin^2(2x) = 3$ for $0 \leq x < 360^\circ$ [+5]