

MHF 4UI UNIT 6 Trigonometric Functions II

Day 6 - Trig Equations (Part III)

Example 1: Solve the following equations, $0 \leq x \leq 2\pi$

a) $6\sin^2x - 5\cos x - 2 = 0$

b) $2\tan x = \sec x$

c) $\sin 2\theta = \frac{\sqrt{3}}{2}$ $0 \leq 2\theta \leq 2\pi$

d) $\cos 2x = \cos^2 x, 0 \leq x \leq 2\pi$

e) $\sin 2x = \cos x, 0 \leq x \leq 2\pi$

f) $\tan x + \sec 2x = 1, \quad 0 \leq x \leq \pi$ ** tough one from HW!

** Really tough one from HW!!

$$g) \tan 2x = 8\cos^2 x - \cot x, 0 \leq x \leq \pi/2$$