

for all real values

$$42. \underline{2 \tan^2 x - 3 \sec x = 0}$$

$$ax^2 + bx + c$$

$$2(\sec^2 x - 1) - 3 \sec x = 0$$

$$2 \sec^2 x - 2 - 3 \sec x = 0$$

$$2 \sec^2 x - 3 \sec x - 2 = 0$$

$$(2 \sec x + 1)(\sec x - 2) = 0$$

$$2 \sec x + 1 = 0$$

$$\sec x - 2 = 0$$

$$\begin{array}{c} -2 \\ \wedge \\ -1 \quad 2 \\ 1 \quad -2 \end{array}$$

$$\sec x = -\frac{1}{2}$$

$$\sec x = 2$$

$$\cos x = -2$$

$$\cos x = \frac{1}{2}$$

$$x = 60, 300^\circ$$

$$60 \times \frac{\pi}{180} = \frac{60\pi}{180} = \frac{\pi}{3}$$

$$300 \times \frac{\pi}{180} = \frac{300\pi}{180} = \frac{5\pi}{3}$$

$$\left. \begin{array}{l} x = \frac{\pi}{3} + 2\pi k \\ x = \frac{5\pi}{3} + 2\pi k \end{array} \right\} k = \text{integer}$$

p. 460 - 461

30-34, 37-40, 46, 72

$$\downarrow$$

omit 1

$$\downarrow$$

omit 1