

7.4.49

$$\sin^2 \theta = 2 \sin \theta + 3$$

$$\sin^2 \theta - 2 \sin \theta - 3 = 0 \quad \text{Let } a = \sin \theta$$

$$a^2 - 2a - 3 = 0$$

$$(a-3)(a+1) = 0, \quad a = 3, -1$$

$$\sin \theta = 3 \\ \text{no soln.}$$

$$\text{or } \sin \theta = -1$$

$$\theta = \frac{3\pi}{2} + 2n\pi$$

7.4.55

$$3 \tan \theta \sin \theta - 2 \tan \theta = 0$$

$$\tan \theta (3 \sin \theta - 2) = 0$$

$$\tan \theta = 0$$

$$\theta = n\pi$$

$$\sin \theta = \frac{2}{3}$$

$$\theta = \arcsin \frac{2}{3} + 2n\pi \\ \pi - \arcsin \frac{2}{3} + 2n\pi$$

Book

$$\theta = n\pi, .7297 + 2n\pi, 2.4119 + 2n\pi$$

Range of arcsin()

