

$$S\alpha C\beta + C\alpha S\beta$$

$$\sin(\pi+x) + \sin(\pi+x) = 1$$

$$0(\cos x) + -1(\sin x) + 0(\cos x) + -1(\sin x)$$

$$- \sin x - \sin x = 1$$

$$-2 \sin x = 1$$

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

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

$$\frac{7\pi}{6}, \frac{11\pi}{6}$$

$$\cos\left(\frac{\pi}{4}-x\right) - \sin\left(\frac{\pi}{4}-x\right) = -1$$

$$[C\alpha C\beta + S\alpha S\beta] - [S\alpha C\beta - C\alpha S\beta] \quad \text{~~C\alpha C\beta +~~}$$

$$\left[\frac{\sqrt{2}}{2}(\cos x) + \frac{\sqrt{2}}{2}(\sin x) \right] - \left[\frac{\sqrt{2}}{2}(\sin x) - \frac{\sqrt{2}}{2}(\cos x) \right]$$

$$\frac{\sqrt{2}}{2}(\sin x) + \frac{\sqrt{2}}{2}(\sin x) = -1$$

$$\frac{2\sqrt{2}}{2} \sin x = -1$$

$$\sqrt{2} \sin x = -1$$

$$\sin x = -\frac{1}{\sqrt{2}}$$

$$\sin x = -\frac{\sqrt{2}}{2}$$

$$\frac{5\pi}{4}, \frac{7\pi}{4}$$

(50)