Solving

Trig Equations

using

Sum & Difference Identities

Ex.1 - Solve:

$$\cos\left(\frac{\pi}{2}+x\right)=\frac{\sqrt{2}}{2}$$

Ex.2 - Solve:

$$\cos\left(\frac{\pi}{6}+x\right)+\sin\left(\frac{\pi}{3}+x\right)=0$$

Ex.3 - Solve:

$$\sin(\pi - x) = \sqrt{2} - \sin x$$

Ex.4 - Solve:

$$\cos\left(x + \frac{3\pi}{2}\right) = 2\sin^2 x - 3$$