

Warmup 8: Solve over the interval $[0, 2\pi)$:

$$\sin\left(\frac{\pi}{2} - x\right) = \frac{1}{2}$$

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

$$1 \cdot \cos x - 0 \cdot \sin x = \frac{1}{2}$$

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

$$x = \frac{\pi}{3}, \frac{5\pi}{3}$$