

Math173 – Section 7.2: Cofunction Identities

Don't memorize! But be prepared to derive them...

Basic Cofunction Identities

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

$$\csc\left(\frac{\pi}{2} - x\right) = \sec x$$

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

$$\sec\left(\frac{\pi}{2} - x\right) = \csc x$$

$$\tan\left(\frac{\pi}{2} - x\right) = \cot x$$

$$\cot\left(\frac{\pi}{2} - x\right) = \tan x$$

More Cofunction Identities

$$\sin\left(x \pm \frac{\pi}{2}\right) = \pm \cos x$$

$$\cos\left(x \pm \frac{\pi}{2}\right) = \mp \sin x$$