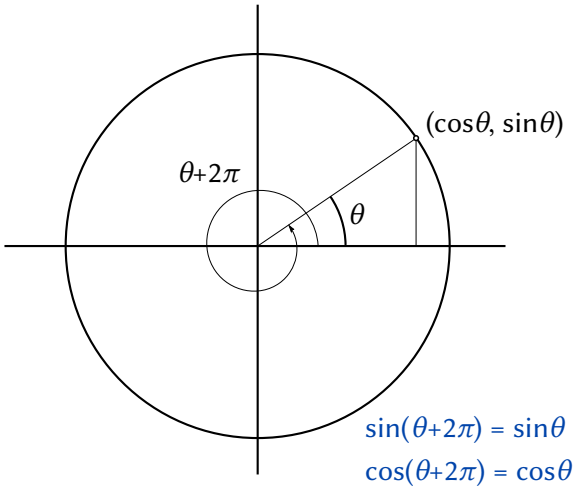
Basic Trigonometric Identitities

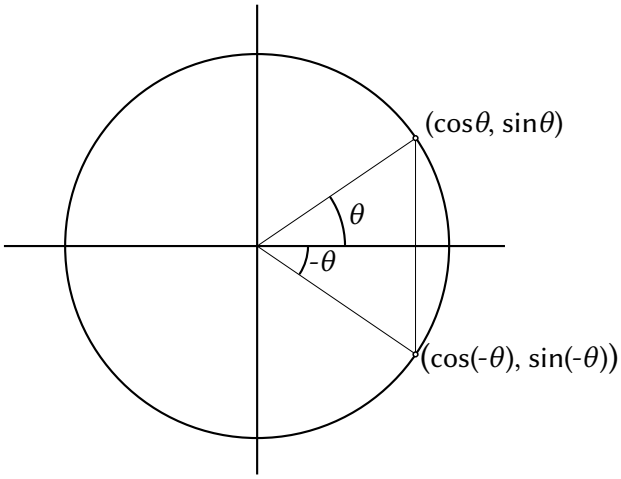
This figure defines sine and cosine. It helps you remember when they are positive or negative



$\sin(\theta+2\pi) = \sin\theta$

$\cos(\theta+2\pi) = \cos\theta$

Even and Odd: What happens when you change the sign of θ

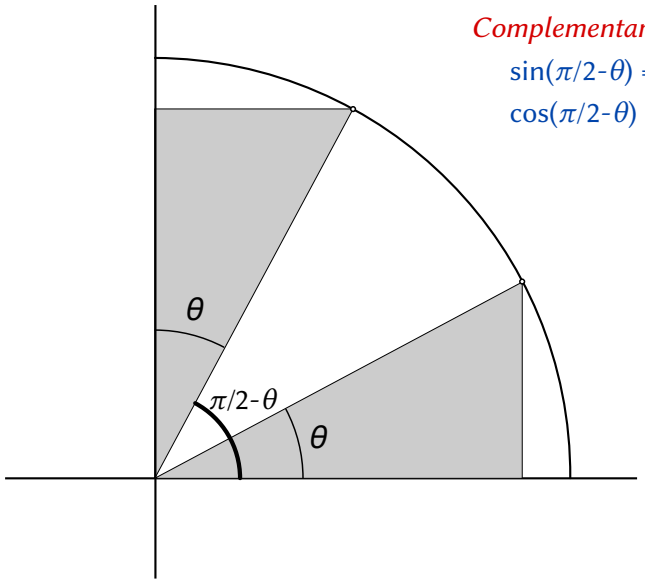


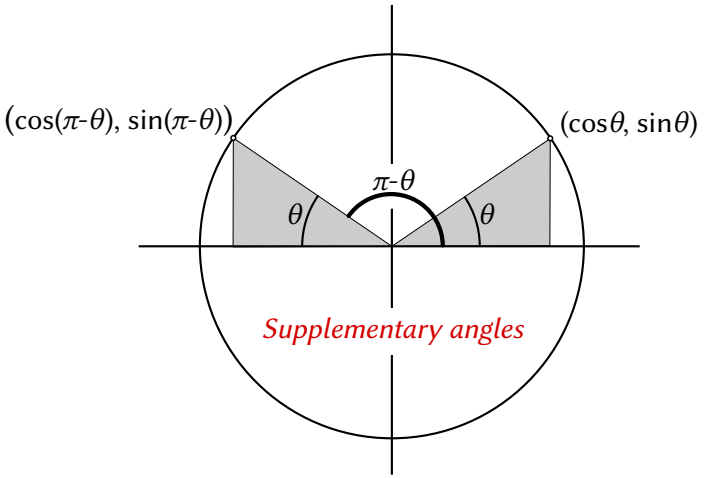
$\cos(-\theta) = \cos\theta$; $\sin(-\theta) = -\sin\theta$

Complementary angles

$\sin(\pi/2-\theta) = \cos\theta$

$\cos(\pi/2-\theta) = \sin\theta$





Supplementary angles

$\cos(\pi-\theta) = -\cos(\theta)$; $\sin(\pi-\theta) = \sin(\theta)$