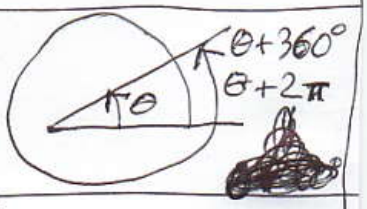
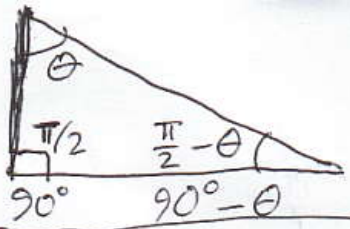
Four Trig symmetries to memorize:

① $\cos(\theta + 2\pi) = \cos\theta$
$\sin(\theta + 2\pi) = \sin\theta$
} Periodicity



② $\cos\left(\frac{\pi}{2} - \theta\right) = \sin\theta$
$\sin\left(\frac{\pi}{2} - \theta\right) = \cos\theta$
} Complentary angles

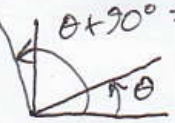


③ $\cos(\pi - \theta) = -\cos\theta$
$\sin(\pi - \theta) = +\sin\theta$
} Supplementary angles

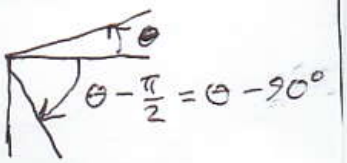
④ $\cos(-\theta) = +\cos\theta$
$\sin(-\theta) = -\sin\theta$
} "Even/odd" Symmetry

4 other useful trig symmetries:

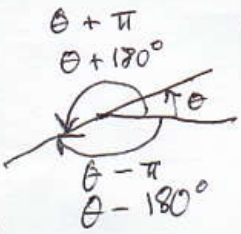
$\cos\left(\theta + \frac{\pi}{2}\right) = -\sin\theta$
$\sin\left(\theta + \frac{\pi}{2}\right) = \cos\theta$
} Adding 90°



$\cos\left(\theta - \frac{\pi}{2}\right) = \sin\theta$
$\sin\left(\theta - \frac{\pi}{2}\right) = -\cos\theta$
} Subtracting 90°



$\cos(\theta \pm \pi) = -\cos\theta$
$\sin(\theta \pm \pi) = -\sin\theta$
} Adding 180°, Subtracting 180°



$\cos\left(-\left(\frac{\pi}{2} + \theta\right)\right) = -\sin\theta$
$\sin\left(-\left(\frac{\pi}{2} + \theta\right)\right) = -\cos\theta$
} Adding 90°, reversing direction