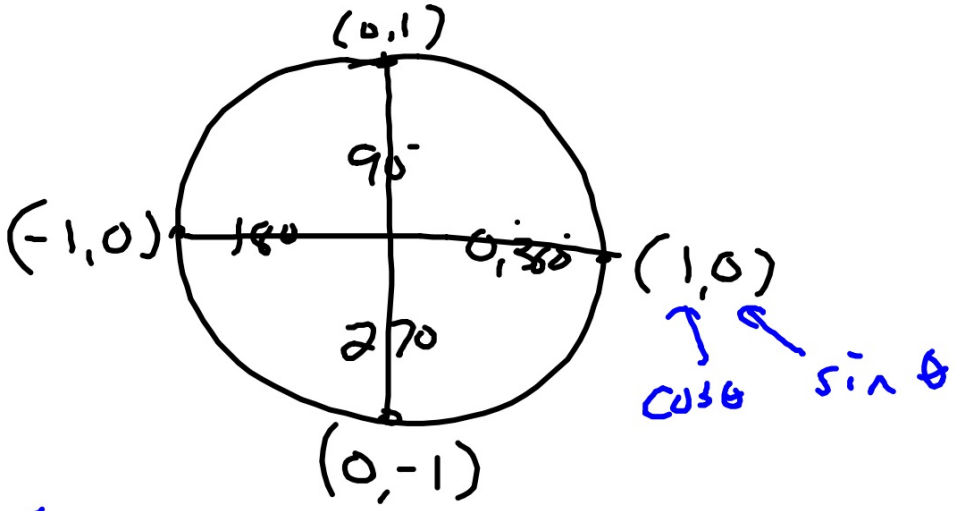
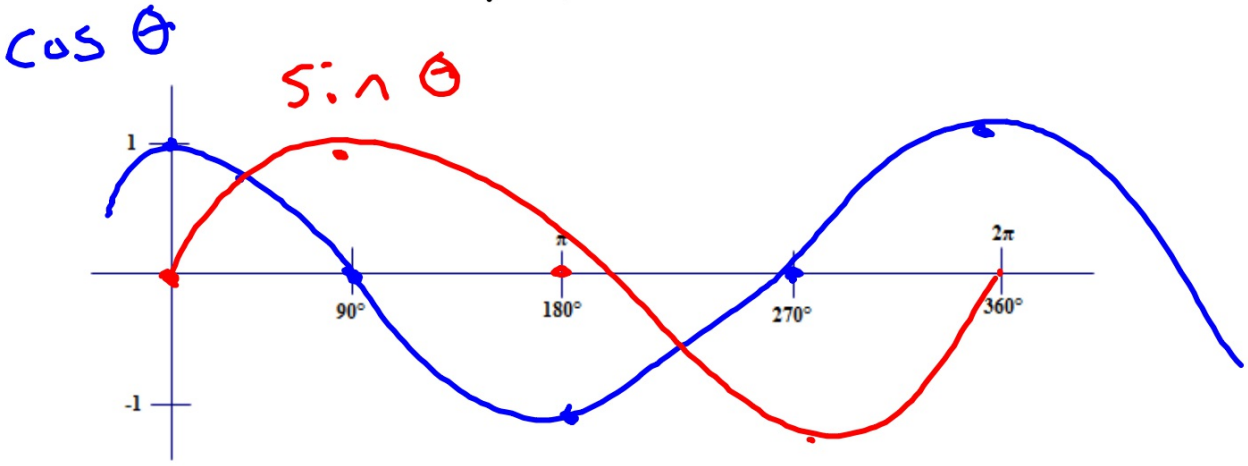
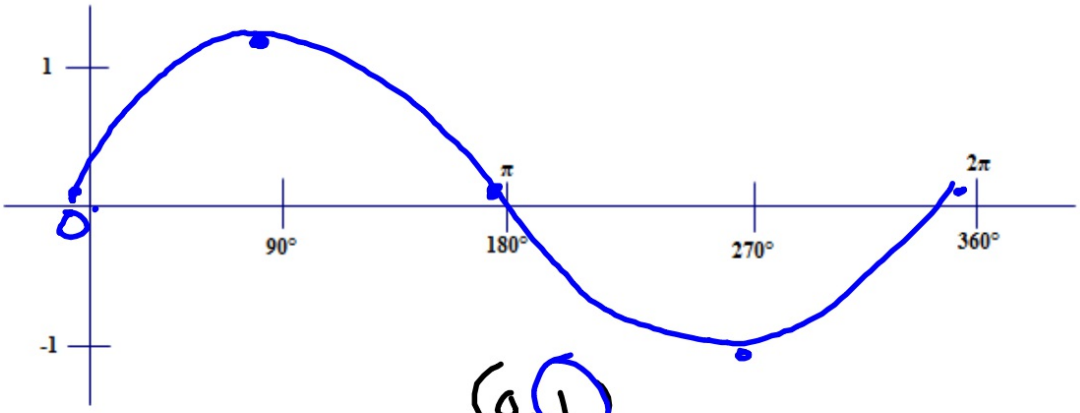
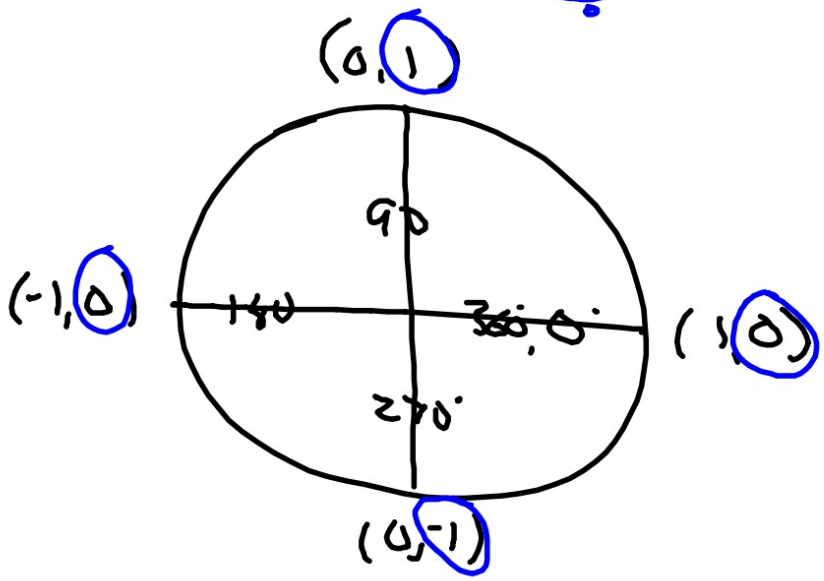
3-20-18 1st Trig

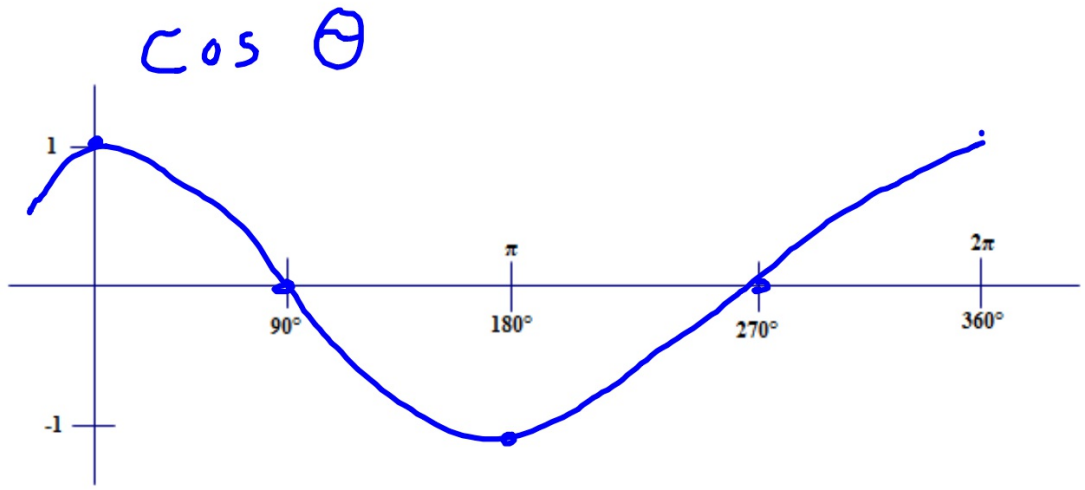




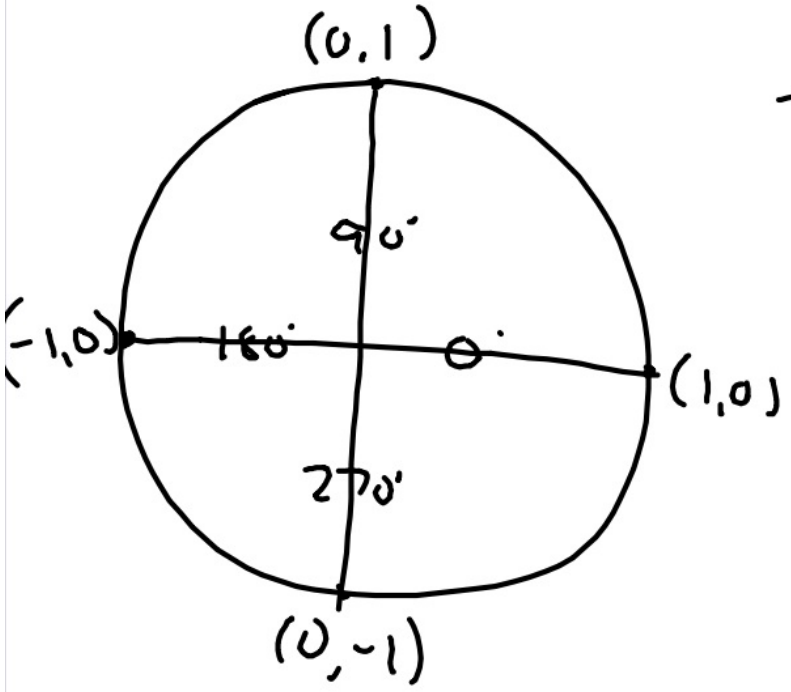
Sin θ



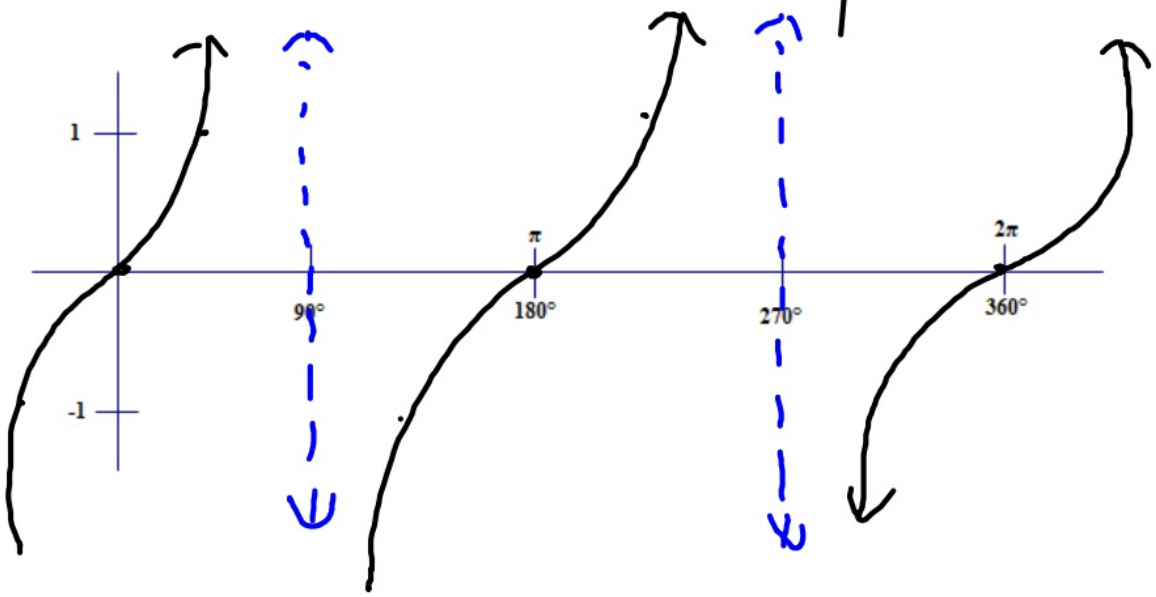



Cos θ
1
-1
90°
π
180°
270°
2π
360°

$$\tan\theta = \frac{\sin\theta}{\cos\theta}$$

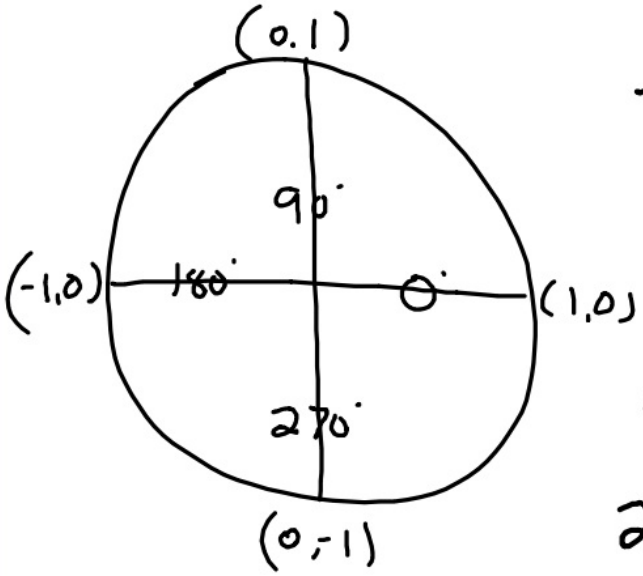


θ	$\tan\theta = \frac{\sin\theta}{\cos\theta}$
0°	$\frac{0}{1} = 0$
90°	$\frac{1}{0} =$ und.
180°	$\frac{0}{-1} = 0$
270°	$\frac{-1}{0} =$ und.
360°	$\frac{0}{1} = 0$
45°	$\frac{\frac{\sqrt{2}}{2}}{\frac{\sqrt{2}}{2}} = 1$

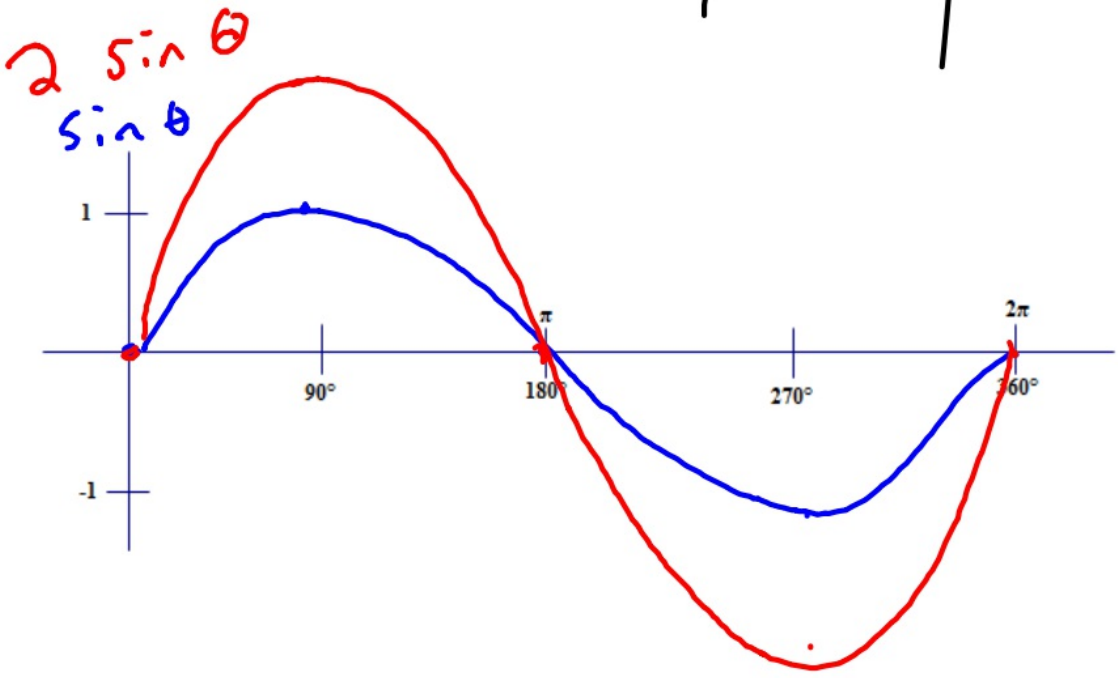


$$\tan\theta = \frac{\text{opp.}}{\text{adj.}} = \frac{\text{huge}}{\text{small}}$$

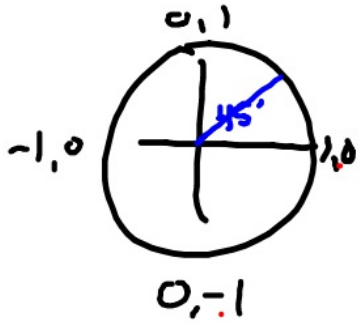
3-20-18 3rd Trig



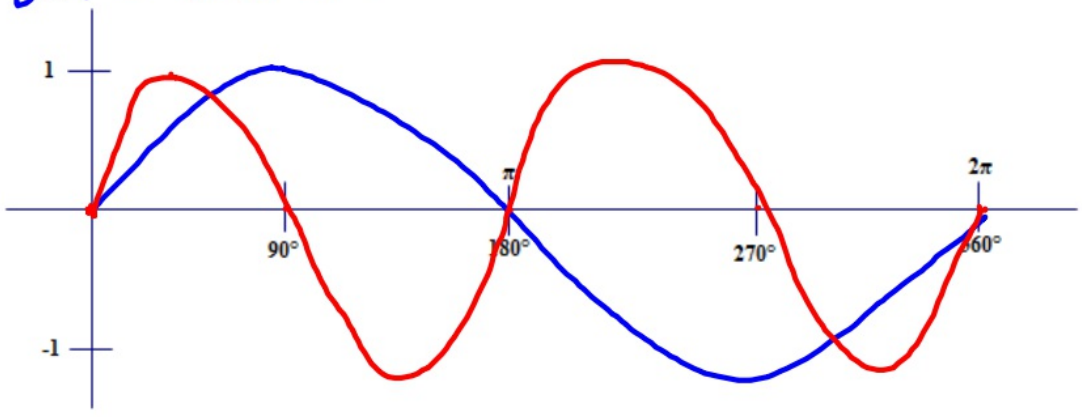
θ	$\sin\theta$	$2\cdot\sin\theta$
0°	0	0
90°	1	2
180°	0	0
270°	-1	-2
360°	0	0



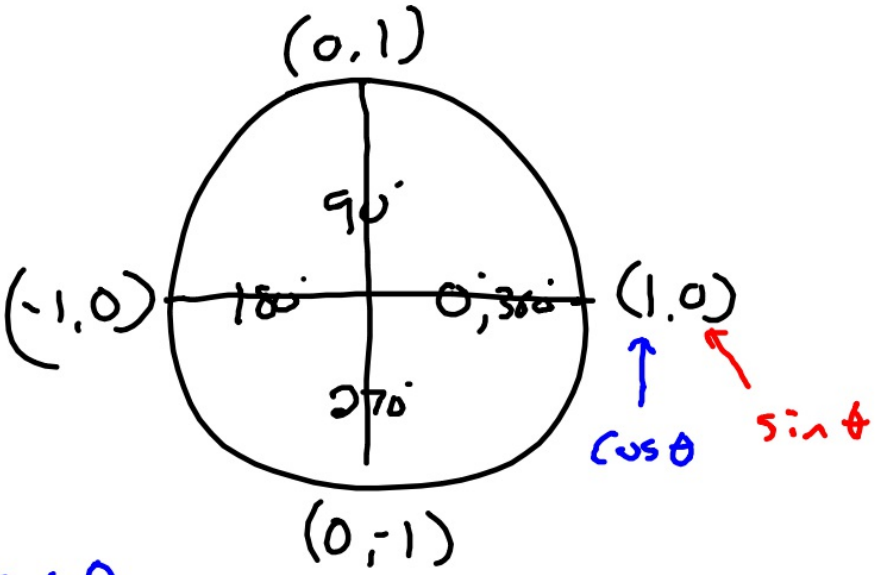
θ	$\sin 2\theta$
0°	$\sin 2\cdot 0 = \sin 0 = 0$
90°	$\sin 2\cdot 90^\circ = \sin 180 = 0$
180°	$\sin 2\cdot 180^\circ = \sin 360^\circ = 0$
45°	$\sin 2\cdot 45^\circ = \sin 90^\circ = 1$

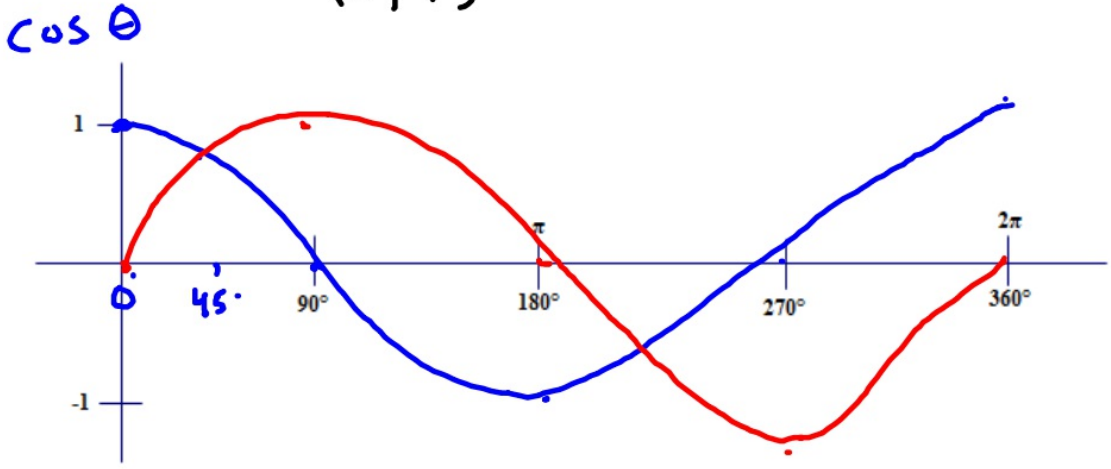


$\sin\theta$ $\sin 2\theta$

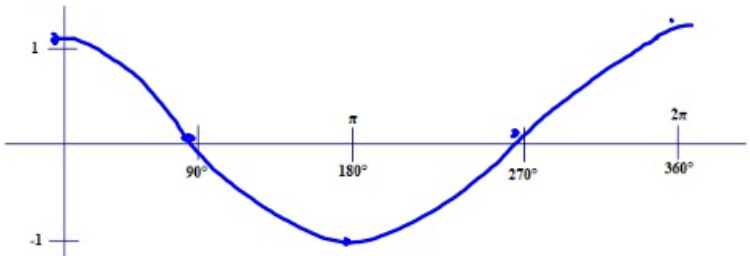


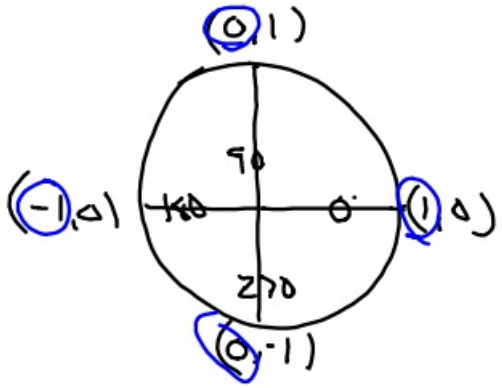
3-20-18 4th

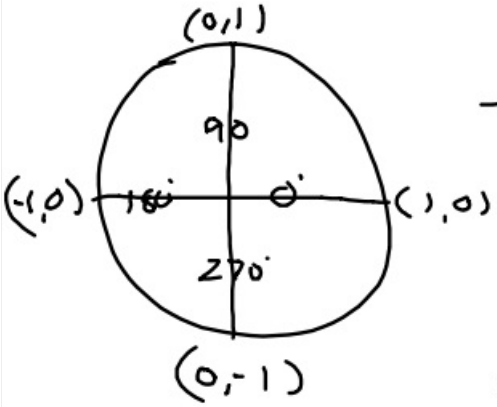

(0,1)
90°
(-1,0)
180°
0°,360°
(1,0)
270°
(0,-1)
cos θ
sin θ


cos θ
1
-1
0°
45°
90°
π
180°
270°
2π
360°

cos θ







θ	$\tan\theta = \frac{\sin\theta}{\cos\theta}$
0°	$\frac{0}{1} = 0$
90°	$\frac{1}{0}$ = undefined
180°	$\frac{0}{-1} = 0$
270°	$\frac{-1}{0}$ = und.
360°	$= \frac{0}{1} = 0$