

Algebra 2

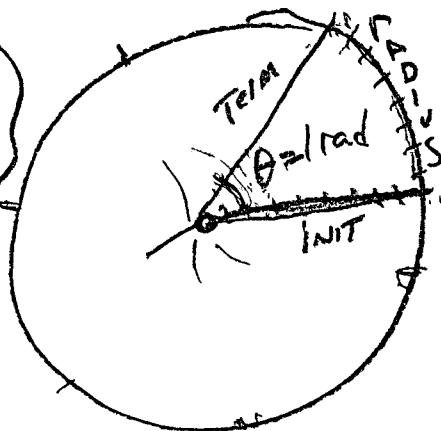
TUESDAY
11-27-12

CLASS NOTES

$$C = 2\pi r$$

EX

DEFINE
1 RADIAN



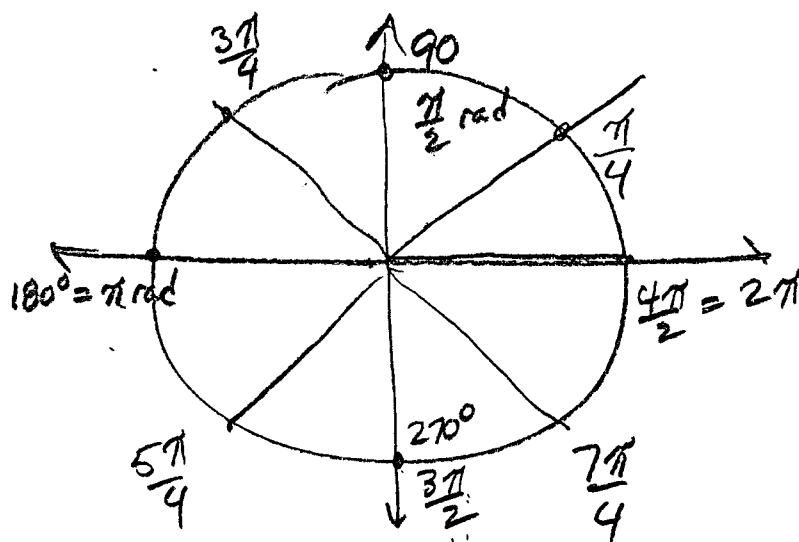
$$\theta = 1 \text{ Radian} \approx 57^\circ$$

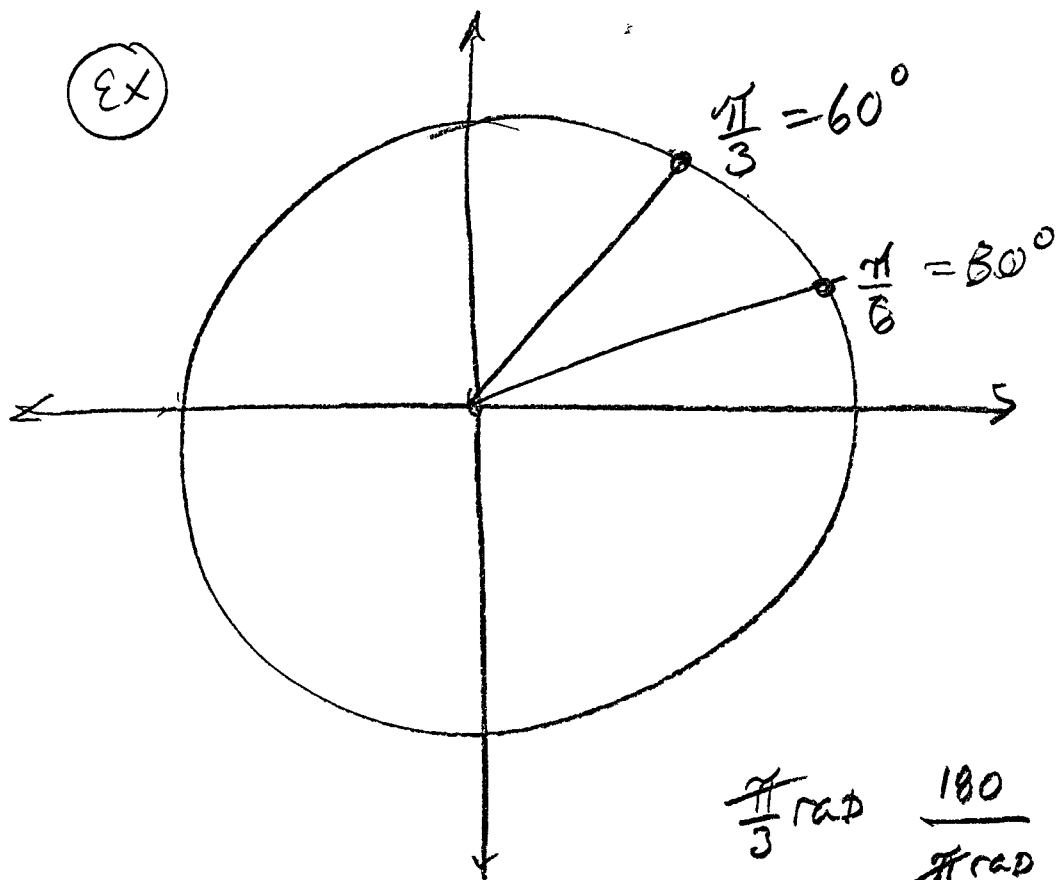
$$\sim 6.28 \approx 2\pi$$

$$2\pi \text{ rad} = 360 \text{ degrees}$$

$$\frac{2\pi}{360} = \frac{1\pi}{180^\circ} \text{ or } \frac{180}{\pi}$$

$$\textcircled{\text{EX}} \quad 90 \text{ deg} = \frac{\pi}{180 \text{ deg}} = \frac{\pi}{2} \text{ rad}$$





$$\frac{\pi}{3} \text{ rad} \cdot \frac{180}{\pi \text{ rad}} = 60^\circ$$

$$\frac{\pi}{6} \cdot \frac{180}{\pi} = 30^\circ$$

(EX)

(16)

$$\sec \frac{21\pi}{4}$$

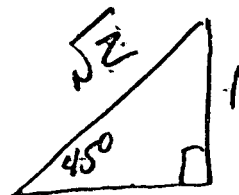
EXACT

$$\sec \theta = \frac{1}{\cos \theta}$$

(S)

$$\frac{\pi}{2} = \frac{2\pi}{4}$$

(A)



$$\theta = \frac{2\pi}{4}$$

$$\pi = \frac{4\pi}{4}$$

$$0 = \frac{2\pi}{1} = \frac{8\pi}{4}$$

$$\sec \frac{21\pi}{4} = -\sec \frac{\pi}{4}$$

$$\theta' = 45^\circ$$

(T)

$$\frac{3\pi}{2} = \frac{6\pi}{4}$$

(C)

$$\cos \frac{\pi}{4} = \frac{\sqrt{2}}{2}$$

$$= -\sqrt{2}$$

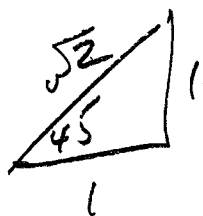
(18)

$$\sin -\frac{9\pi}{4}$$

(S)

$$\frac{\pi}{2} = \frac{2\pi}{4}$$

(A)



$$\pi = \frac{4\pi}{4}$$

$$0, 2\pi = \frac{8\pi}{4}$$

(T)

$$\frac{3\pi}{2} = \frac{6\pi}{4}$$

$$\text{ref } \theta' = \frac{\pi}{4} = 45^\circ$$

$$\sin -\frac{9\pi}{4} = -\sin \frac{\pi}{4}$$

$$= -\frac{\sqrt{2}}{2}$$

(3)

(34) RADIANS $\Rightarrow -410^\circ$

$$-410^\circ \cdot \frac{\pi \text{ rad}}{180^\circ} = \boxed{-\frac{41}{18} \pi \text{ rad}}$$

(50) Ref Angle, $\theta = -\frac{43}{12} \pi \text{ rad}$

