

Try these:

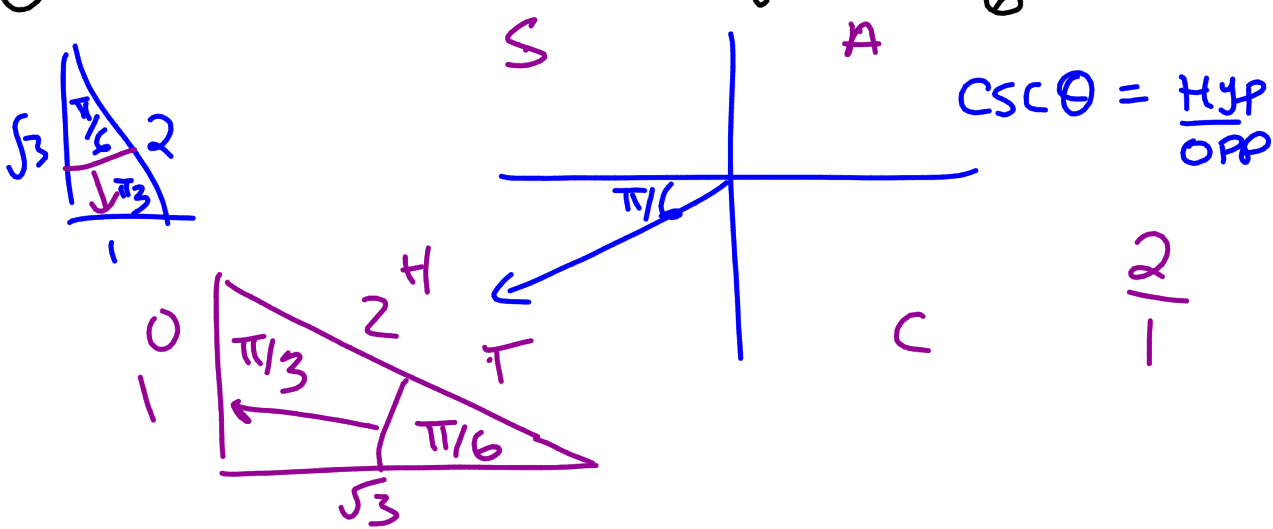
$$\frac{\text{Rad}}{\pi} = \frac{\text{Deg}}{180}$$

① $135^\circ = \frac{3\pi}{4} \text{ rad}$

② $\frac{7\pi}{4} = 315^\circ$

③ What is the arc length of a 15.3cm radius circle that is subtended by 73°? $\pi \frac{73^\circ}{180} = \frac{x}{r} \pi = 1.27$ $a = r\theta$
 $a = 12 \cdot 1.27$

④ The **EXACT** value of $\csc \frac{7\pi}{6}$ is: -2



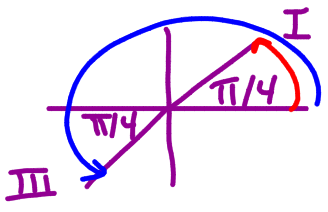
① Solve for θ over $0 \leq \theta < 2\pi$
 factor first

$$\tan^2 \theta - \tan \theta = 0$$

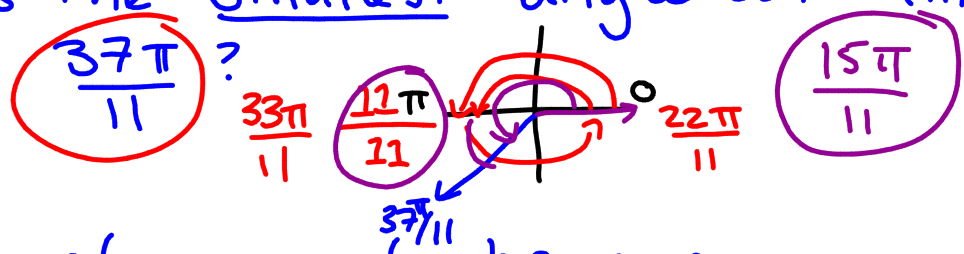
$$\tan \theta (\tan \theta - 1) = 0$$

$$\tan \theta = 0 \quad \tan \theta = 1$$

$$\theta_1 = 0, \pi \quad \theta_2 = \pi/4 \text{ or } 5\pi/4$$



② What is the smallest angle coterminal with $\frac{37\pi}{11}$?



③ What angle or angles have a sine value of $\frac{\sqrt{5}}{4}$ in the domain $0 \leq \theta < 2\pi$

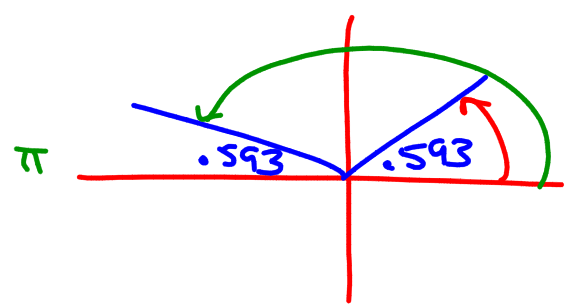
$$\sin \theta = \frac{\sqrt{5}}{4}$$

$$\sin^{-1}(\sqrt{5}/4)$$

$$\theta = 0.593$$

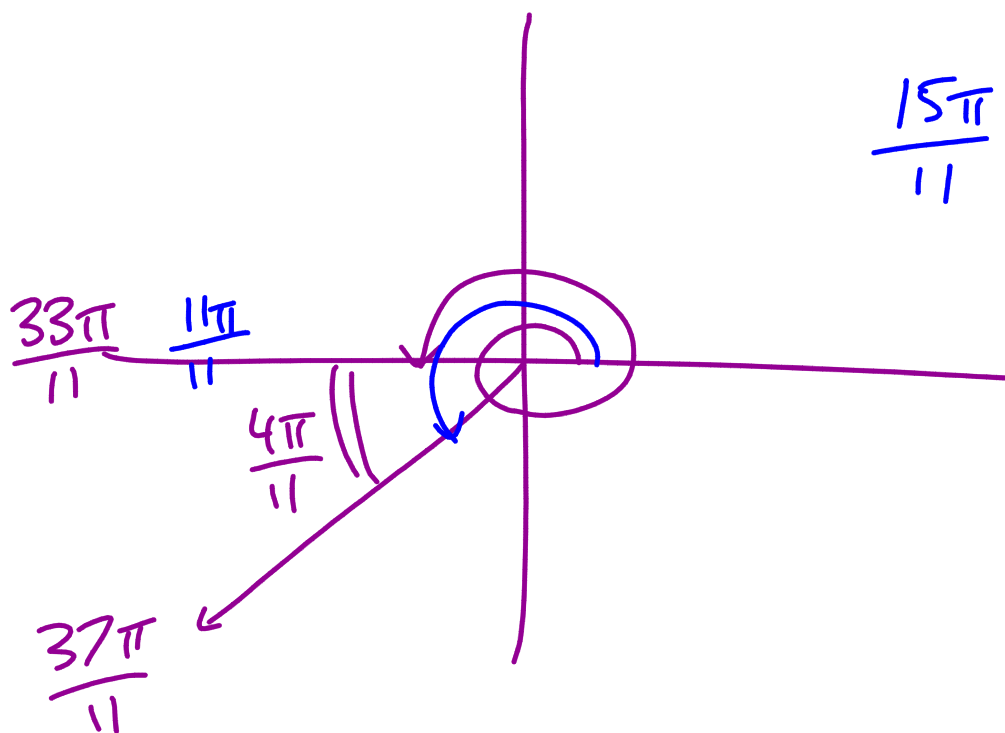
$$\text{or } \theta = \pi - .593$$

$$\theta = 2.549$$

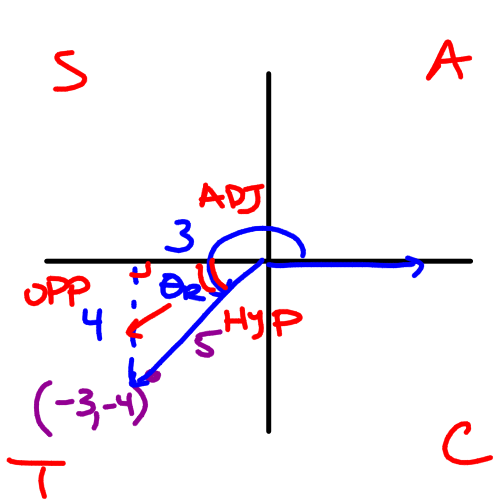


General sol:

$$\theta = \begin{cases} .593 + 2\pi n \\ 2.549 + 2\pi n \end{cases}, n \in \mathbb{I}$$



Exact 6 trig ratios P(-3, -4)



$$\begin{aligned} \sin \theta &= -\frac{4}{5} & \csc \theta &= -\frac{5}{4} \\ \cos \theta &= -\frac{3}{5} & \sec \theta &= -\frac{5}{3} \\ \tan \theta &= +\frac{4}{3} & \cot \theta &= +\frac{3}{4} \end{aligned}$$

Tuesday \Rightarrow Intense Trig Equations
(over domains and
general solⁿ's)

Wed \Rightarrow Review Day
 \leadsto Chart how it all
connects plus time
just to work!

Thurs \Rightarrow "Eerie" Questions

Fri \Rightarrow TEST Ch 4