

If you can get your Week 2 in before I post solutions, no deduction.

See Late Edition for Week 2.

It will close and I will open up a Late-Late Edition, with 30% discount that'll just stay open, indefinitely.

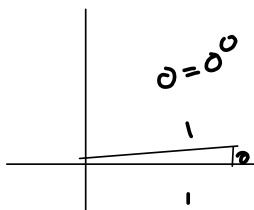
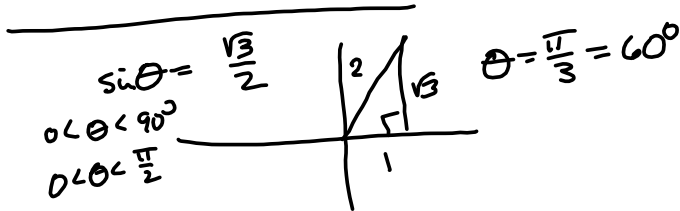
$$(2.5 \text{ radians}) \left( \frac{180^\circ}{\pi} \text{ radians} \right) = \left( \frac{5}{2} \right) \left( \frac{180^\circ}{\pi} \right) = \frac{5(90^\circ)}{\pi} = \frac{450^\circ}{\pi} = \left( \frac{450}{\pi} \right)^\circ$$

$\theta = \frac{s \text{ in}}{r \text{ in}}$  is defin of radian,  
which is unit-less (PURE NUMBER)

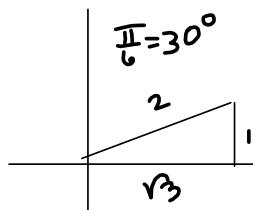
$$\frac{s \text{ m}}{r \text{ m}} = \frac{s}{r} \text{ No units}$$

units cancel

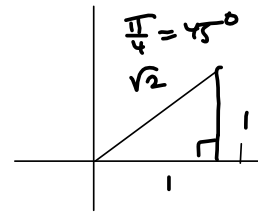
$$\cot(2.5) = \frac{1}{\tan(2.5)}$$



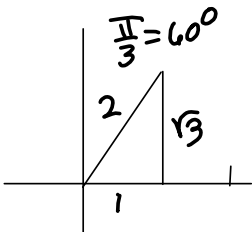
$$\begin{aligned} \sin 0 &= \frac{0}{1} = 0 & \csc 0 &= \frac{1}{0} \text{ } \cancel{\text{A}} \\ \cos 0 &= \frac{1}{1} = 1 & \sec 0 &= \frac{1}{1} = 1 \\ \tan 0 &= \frac{0}{1} = 0 & \cot 0 &= \frac{1}{0} \text{ } \cancel{\text{A}} \\ & & & \text{(undefined)} \end{aligned}$$



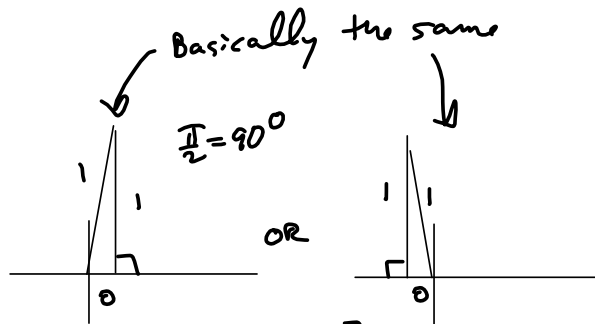
$$\begin{aligned} \sin \frac{\pi}{6} &= \frac{1}{2} & \csc \frac{\pi}{6} &= 2 \\ \cos \frac{\pi}{6} &= \frac{\sqrt{3}}{2} & \sec \frac{\pi}{6} &= \frac{2}{\sqrt{3}} \\ \tan \frac{\pi}{6} &= \frac{1}{\sqrt{3}} & \cot \theta &= \sqrt{3} \end{aligned}$$



$$\begin{aligned} \sin \frac{\pi}{4} &= \frac{1}{\sqrt{2}} \\ \cos \frac{\pi}{4} &= \frac{1}{\sqrt{2}} \\ \tan \theta &= 1 \end{aligned}$$



$$\begin{aligned} \sin \frac{\pi}{3} &= \frac{\sqrt{3}}{2} & \csc \frac{\pi}{3} &= \frac{2}{\sqrt{3}} \\ \cos \frac{\pi}{3} &= \frac{1}{2} & \sec \frac{\pi}{3} &= 2 \\ \tan \frac{\pi}{3} &= \frac{\sqrt{3}}{1} = \sqrt{3} & \cot \left( \frac{\pi}{3} \right) &= \frac{1}{\sqrt{3}} \end{aligned}$$

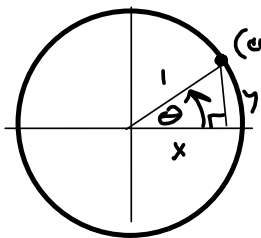


$$\begin{aligned} \sec \frac{\pi}{2} &= 1 & \csc \frac{\pi}{2} &= 1 \\ \cos \frac{\pi}{2} &= 0 & \sec \frac{\pi}{2} & \cancel{\text{A}} \\ \tan \frac{\pi}{2} &= \frac{1}{0} \text{ } \cancel{\text{A}} & \cot \frac{\pi}{2} &= \frac{0}{1} = 0 \end{aligned}$$

Week 2 Written #11. we show

$$\tan \theta + \cot \theta = \csc \theta \sec \theta$$

$$\frac{\sin \theta}{\cos \theta} + \frac{\cos \theta}{\sin \theta} = \frac{\sin^2 \theta + \cos^2 \theta}{\sin \theta \cos \theta} = \frac{1}{\sin \theta \cos \theta} = \frac{1}{\frac{1}{\csc \theta} \cdot \frac{1}{\sec \theta}} = \csc \theta \sec \theta$$



$$x = r \cos \theta$$

$$y = r \sin \theta$$

$$r = 1 \Rightarrow x = \cos \theta$$

$$y = \sin \theta$$

$$x^2 + y^2 = r^2 = 1^2 = 1$$

$$\cos^2 \theta + \sin^2 \theta = 1$$

I'll open up a "Late Edition"

$\sin(35^\circ)$  is better

$\sin\left(\frac{\pi}{6}(x-2)\right) +$

The argument of  $f(x)$  is "x."

$\sin \theta$        $\sin(\theta)$

$\sin(\theta) \cos(\theta)$   
 $\neq \sin(\theta \cos \theta)$

$\frac{1}{2} r^2 \theta$        $\frac{1}{2} r^2 \theta$   
 $\frac{1}{2} r^2 \theta$        $\frac{1}{2 r^2 \theta}$

$\frac{1}{2} xy$   
 $\frac{1}{2} xy = \frac{1}{2x} y$   
 $\frac{1}{2xy}$

**Let me know if your Week 1 didn't get graded. To see how I marked it up, go to Assignments, where you entered/uploaded your assignment. It's either graded, right there, OR there's an attachment with the annotations (grading).**

**Some of them were too big to leave in the same place and required an attachment, separately.**