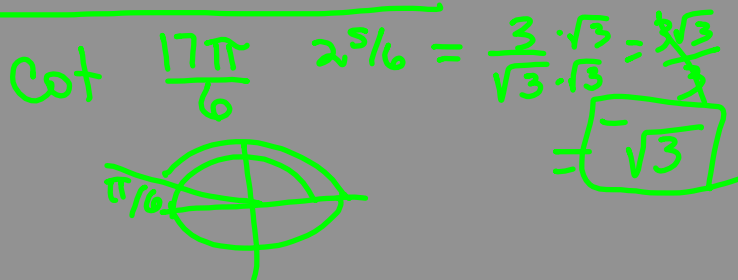
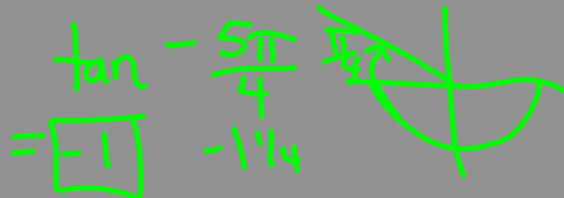
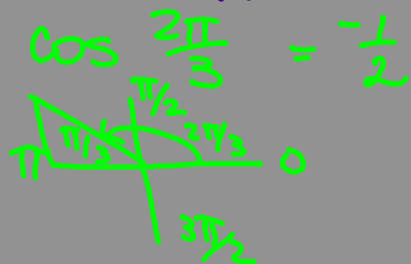


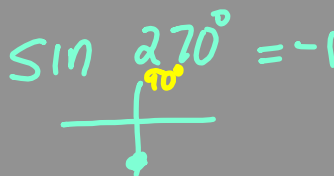
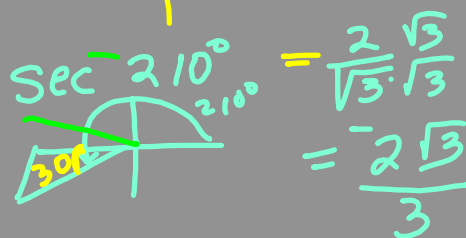
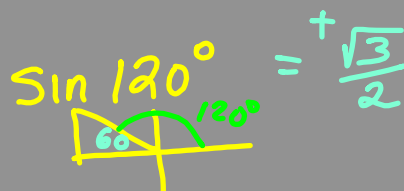
# SPECIAL ANGLE VALUES

deg	rads	Sin	cos	tan
0°	0	$\frac{\sqrt{0}}{2} = 0$	1	$\frac{0}{1} = 0$
30°	$\frac{\pi}{6}$	$\frac{\sqrt{1}}{2} = \frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$
45°	$\frac{\pi}{4}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{\sqrt{2}} = 1$
60°	$\frac{\pi}{3}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\frac{\sqrt{3}}{1} = \sqrt{3}$
90°	$\frac{\pi}{2}$	$\frac{\sqrt{4}}{2} = 1$	0	$\frac{1}{0} = \text{undef}$

csc      sec      cot

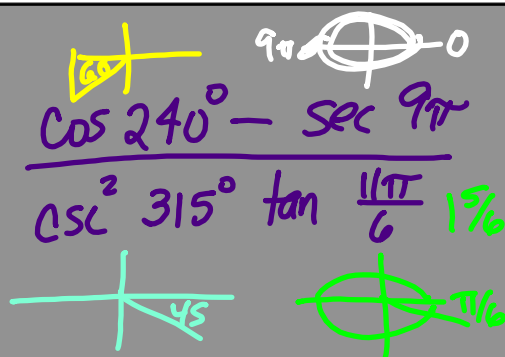


$\tan \theta = \frac{y}{x}$   
 $\sin \theta = \frac{y}{r}$      $\cos \theta = \frac{x}{r}$



deg	rads	Sin	cos	tan
0°	0	$\frac{\sqrt{0}}{2} = 0$	1	$\frac{0}{1} = 0$
30°	$\frac{\pi}{6}$	$\frac{\sqrt{1}}{2} = \frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$
45°	$\frac{\pi}{4}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{\sqrt{2}} = 1$
60°	$\frac{\pi}{3}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\frac{\sqrt{3}}{1} = \sqrt{3}$
90°	$\frac{\pi}{2}$	$\frac{\sqrt{4}}{2} = 1$	0	$\frac{1}{0} = \text{undef}$

csc
sec
cot



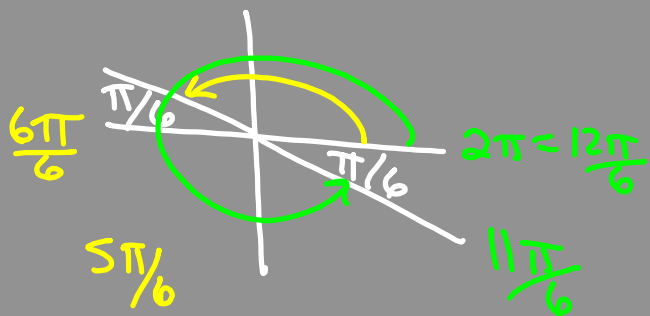
$$\frac{\cos 240^\circ - \sec 90^\circ}{\csc^2 315^\circ \tan \frac{11\pi}{6}}$$



$$\begin{aligned}
 & \frac{-\frac{1}{2} - + 1}{(\sqrt{2})^2 \cdot \frac{\sqrt{3}}{3}} \\
 & = \frac{\frac{1}{2}}{-\frac{2\sqrt{3}}{3}} = \frac{1}{2} \cdot \frac{3}{-2\sqrt{3}} \\
 & = \frac{3 \cdot \sqrt{3}}{-4\sqrt{3} \cdot \sqrt{3}} \\
 & = \frac{3\sqrt{3}}{-12} = \boxed{\frac{-\sqrt{3}}{4}}
 \end{aligned}$$

deg	rads	Sin	cos	tan
0°	0	$\frac{\sqrt{0}}{2} = 0$	1	$\frac{0}{1} = 0$
30°	$\frac{\pi}{6}$	$\frac{\sqrt{1}}{2} = \frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$
45°	$\frac{\pi}{4}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{\sqrt{2}} = 1$
60°	$\frac{\pi}{3}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\frac{\sqrt{3}}{1} = \sqrt{3}$
90°	$\frac{\pi}{2}$	$\frac{\sqrt{4}}{2} = 1$	0	$\frac{1}{0} = \text{undef}$

csc sec cot



Find angle  $\theta$ ,  $0^\circ < \theta < 360^\circ$

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

- 1) Quadrant
- 2) Ref  $\angle$
- 3) Name angles



135°, 225°

