

	cos θ		sin θ		tan θ		cot θ		sec θ		csc θ	
<b>RIGHT Δ</b> <i>x, y</i> PLANE $(r = \sqrt{x^2 + y^2})$ <b>UNIT CIRCLE</b>	adj hyp $\frac{x}{r}$	$x$	opp hyp $\frac{y}{r}$	$y$	opp adj $\frac{y}{x}$ = slope	$\frac{y}{x}$ = slope	adj opp $\frac{x}{y}$	$\frac{x}{y}$	hyp adj $\frac{r}{x}$	$\frac{1}{x}$	hyp opp $\frac{r}{y}$	$\frac{1}{y}$
<b>RECIPROCAL</b> <b>QUOTIENT</b> <b>ODD/EVEN</b> <b>PYTHAGOREAN</b> <b>COFUNCTION</b>	$\cos \theta = \frac{1}{\sec \theta}$  $\cos(-\theta) = \cos \theta$  $\cos^2 \theta = 1 - \sin^2 \theta$ $(\cos^2 \theta + \sin^2 \theta = 1)$ $\cos \theta = \sin(90^\circ - \theta)$	$\sin \theta = \frac{1}{\csc \theta}$  $\sin(-\theta) = -\sin \theta$  $\sin^2 \theta = 1 - \cos^2 \theta$ $(\cos^2 \theta + \sin^2 \theta = 1)$ $\sin \theta = \cos(90^\circ - \theta)$	$\tan \theta = \frac{1}{\cot \theta}$ $\tan \theta = \frac{\sin \theta}{\cos \theta}$ $\tan(-\theta) = -\tan \theta$ $\tan^2 \theta = \sec^2 \theta - 1$	$\cot \theta = \frac{1}{\tan \theta}$ $\cot \theta = \frac{\cos \theta}{\sin \theta}$ $\cot(-\theta) = -\cot \theta$ $\cot^2 \theta = \csc^2 \theta - 1$	$\sec \theta = \frac{1}{\cos \theta}$  $\sec(-\theta) = \sec \theta$  $\sec^2 \theta = 1 + \tan^2 \theta$	$\csc \theta = \frac{1}{\sin \theta}$  $\csc(-\theta) = -\csc \theta$  $\csc^2 \theta = 1 + \cot^2 \theta$	<b>QUADRANT I</b> <b>QUADRANT II</b> <b>QUADRANT III</b> <b>QUADRANT IV</b>	+ - - +	+ + - -	+ - + -	+ - - +	+ + - -
<b>VALUES IN QUADRANT I</b>  $0 = 0^\circ$ $\frac{\pi}{6} = 30^\circ$ $\frac{\pi}{4} = 45^\circ$ $\frac{\pi}{3} = 60^\circ$ $\frac{\pi}{2} = 90^\circ$	1 $\frac{\sqrt{3}}{2}$ $\frac{\sqrt{2}}{2}$ $\frac{1}{2}$ 0	0 $\frac{1}{2}$ $\frac{\sqrt{2}}{2}$ $\frac{\sqrt{3}}{2}$ 1	0 $\frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$ 1 $\sqrt{3}$ DNE	DNE $\sqrt{3}$ 1 $\frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$ 0	1 $\frac{2}{\sqrt{3}}$ $\sqrt{2}$ 2 DNE	DNE 2 $\sqrt{2}$ $\frac{2}{\sqrt{3}}$ 1						