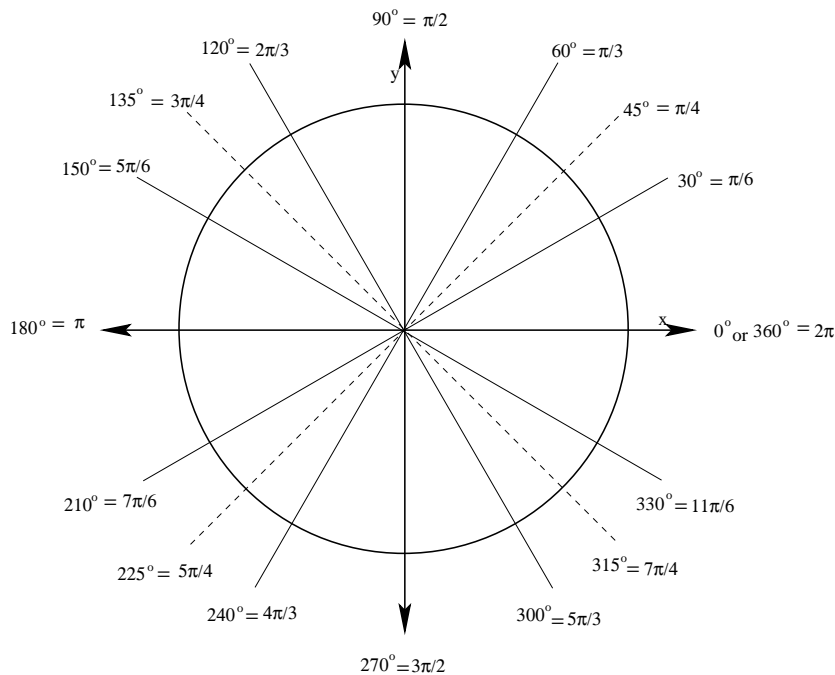
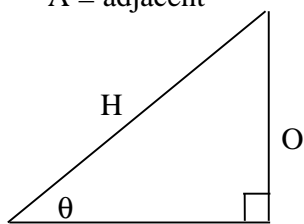


### I. Key Angles in Degree and Radian Measure



### II. Trigonometric Functions

H = hypotenuse  
 O = opposite  
 A = adjacent



$\sin \theta = \frac{O}{H} = \frac{1}{\csc \theta}$	$\cos \theta = \frac{A}{H} = \frac{1}{\sec \theta}$	$\tan \theta = \frac{O}{A} = \frac{1}{\cot \theta}$
$\csc \theta = \frac{H}{O} = \frac{1}{\sin \theta}$	$\sec \theta = \frac{H}{A} = \frac{1}{\cos \theta}$	$\cot \theta = \frac{A}{O} = \frac{1}{\tan \theta}$

### III. Special Values of Trigonometric Functions

$\theta$ (radians)	$\theta$ (degrees)	$\sin \theta$	$\cos \theta$	$\tan \theta$	$\cot \theta$	$\sec \theta$	$\csc \theta$
$\frac{\pi}{6}$	$30^\circ$	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{3}}{3}$	$\sqrt{3}$	$\frac{2\sqrt{3}}{3}$	2
$\frac{\pi}{4}$	$45^\circ$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	1	1	$\sqrt{2}$	$\sqrt{2}$
$\frac{\pi}{3}$	$60^\circ$	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$	$\frac{\sqrt{3}}{3}$	2	$\frac{2\sqrt{3}}{3}$