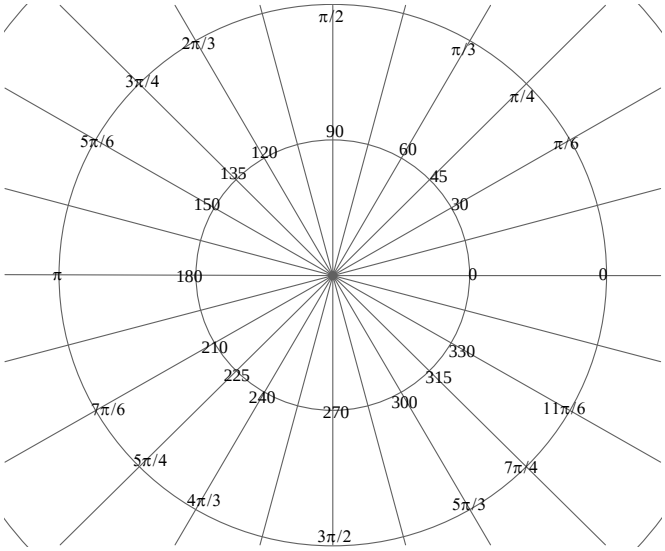
Things to memorize for Trigonometry



Degrees	Radians	Sin	Cos	Tan
0°	0	0	1	0
30°	$\frac{\pi}{6}$	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{3}}{3}$
45°	$\frac{\pi}{4}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	1
60°	$\frac{\pi}{3}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$
90°	$\frac{\pi}{2}$	1	0	Undefined
180°	π	0	-1	0
270°	$\frac{3\pi}{2}$	-1	0	Undefined

To convert between radians and degrees	$\frac{degrees}{180} = \frac{radians}{\pi}$
Arc length (s) if θ is measured in radians	$s = r\theta$
Area of a sector if θ is measured in radians	$area = \frac{\theta}{2} r^2$
Angular velocity (ω)	$\omega = \frac{\theta}{t}$
Linear velocity (V)	$v = \frac{s}{t} = \frac{r\theta}{t} = \omega r$

$\sin\theta = \frac{y}{r} = \frac{opp}{hyp}$	$\csc\theta = \frac{r}{y} = \frac{hyp}{opp}$
$\cos\theta = \frac{x}{r} = \frac{adj}{hyp}$	$\sec\theta = \frac{r}{x} = \frac{hyp}{adj}$
$\tan\theta = \frac{y}{x} = \frac{opp}{adj}$	$\cot\theta = \frac{x}{y} = \frac{adj}{opp}$

Seniors Sin (and csc) are positive	**All** All are positive
Turn Tan (and cot) are positive	**Crazy** Cos (and sec) are positive

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