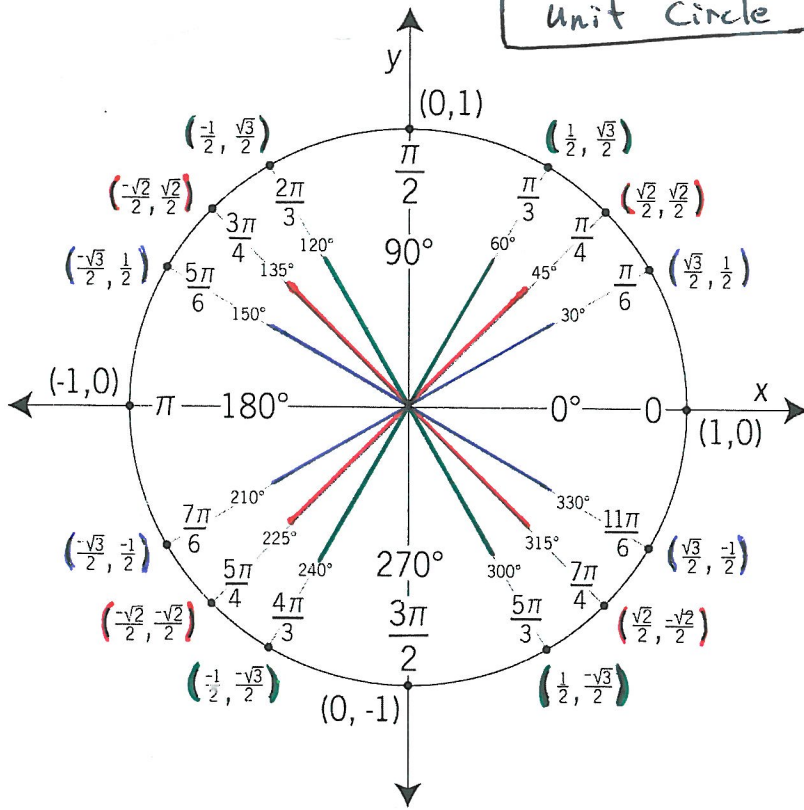


$$(x-h)^2 + (y-k)^2 = r^2$$

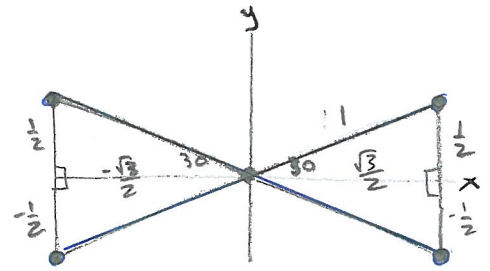
$$x^2 + y^2 = 1$$

Unit Circle



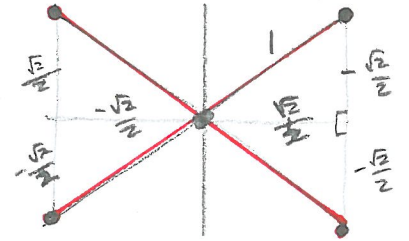
$$2x = 1$$

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



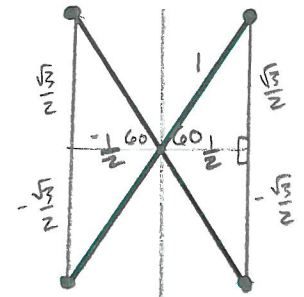
$$x\sqrt{2} = 1$$

$$x = \frac{1}{\sqrt{2}}$$



$$2x = 1$$

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



for unit circle																
from Geometry																
Degrees	0	30	45	60	90	120	135	150	180	210	225	240	270	300	315	330
Radians	0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\frac{2\pi}{3}$	$\frac{3\pi}{4}$	$\frac{5\pi}{6}$	π	$\frac{7\pi}{6}$	$\frac{5\pi}{4}$	$\frac{4\pi}{3}$	$\frac{3\pi}{2}$	$\frac{5\pi}{3}$	$\frac{7\pi}{4}$	$\frac{11\pi}{6}$
$\frac{opp}{hyp} = \sin = y$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	$-\frac{1}{2}$	$-\frac{\sqrt{2}}{2}$	$-\frac{\sqrt{3}}{2}$	-1	$-\frac{\sqrt{3}}{2}$	$-\frac{\sqrt{2}}{2}$	$-\frac{1}{2}$
sin (dec.)	0	.5	.707	.866	1	.866	.707	.5	0	-.5	-.707	-.866	-1	-.866	-.707	-.5
$\frac{adj}{hyp} = \cos = x$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	$-\frac{1}{2}$	$-\frac{\sqrt{2}}{2}$	$-\frac{\sqrt{3}}{2}$	-1	$-\frac{\sqrt{3}}{2}$	$-\frac{\sqrt{2}}{2}$	$-\frac{1}{2}$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$
cos (dec.)	1	.866	.707	.5	0	-.5	-.707	-.866	-1	-.866	-.707	-.5	0	.5	.707	.866
$\frac{opp}{adj} = \tan = \frac{y}{x}$	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	undef	$-\sqrt{3}$	-1	$-\frac{\sqrt{3}}{3}$	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	undef	$-\sqrt{3}$	-1	$-\frac{\sqrt{3}}{3}$
$\frac{1}{\sin} = \csc = \frac{1}{y}$	undef	2	$\sqrt{2}$	$\frac{2\sqrt{3}}{3}$	1	$\frac{2\sqrt{3}}{3}$	$\sqrt{2}$	2	undef	-2	$-\sqrt{2}$	$-\frac{2\sqrt{3}}{3}$	-1	$\frac{2\sqrt{3}}{3}$	$\sqrt{2}$	2
$\frac{1}{\cos} = \sec = \frac{1}{x}$	1	$\frac{2\sqrt{3}}{3}$	$\sqrt{2}$	2	undef	-2	$-\sqrt{2}$	$-\frac{2\sqrt{3}}{3}$	-1	$-\frac{2\sqrt{3}}{3}$	$-\sqrt{2}$	-2	undef	2	$\sqrt{2}$	$\frac{2\sqrt{3}}{3}$
$\frac{1}{\tan} = \cot = \frac{x}{y}$	undef	$\sqrt{3}$	1	$\frac{\sqrt{3}}{3}$	0	$-\frac{\sqrt{3}}{3}$	-1	$-\sqrt{3}$	undef	$\sqrt{3}$	1	$\frac{\sqrt{3}}{3}$	0	$-\frac{\sqrt{3}}{3}$	-1	$-\sqrt{3}$