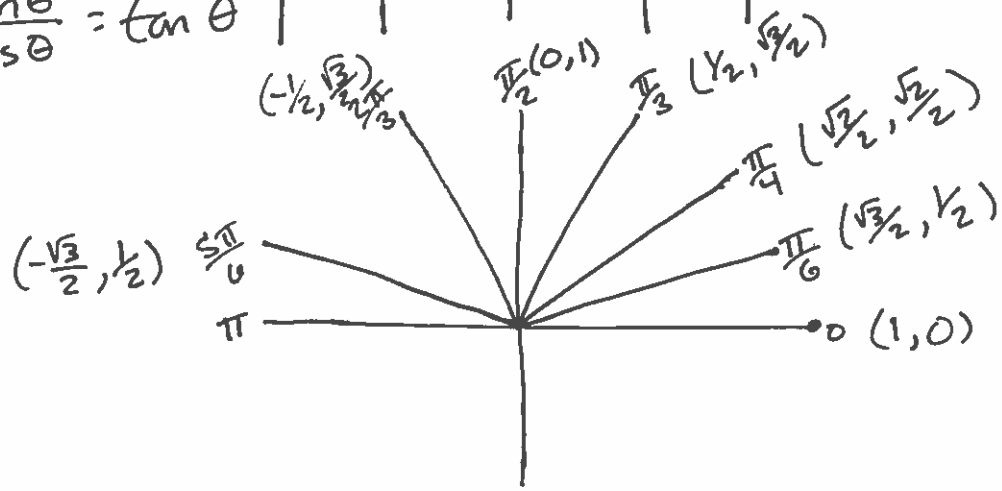
1.3 Trig Functions

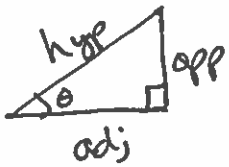
* See Blackboard for Reference Guide *

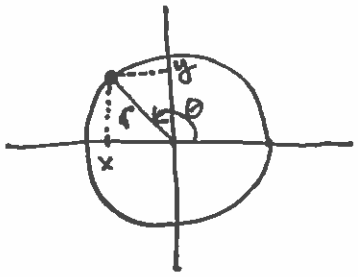
π radians $= 180°$

2π radians $= 360°$

	0	$\pi/6$	$\pi/4$	$\pi/3$	$\pi/2$
$\sin\theta$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
$\cos\theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
$\frac{\sin\theta}{\cos\theta} = \tan\theta$					







sine: $\sin\theta = \frac{y}{r} = \sin(\theta)$

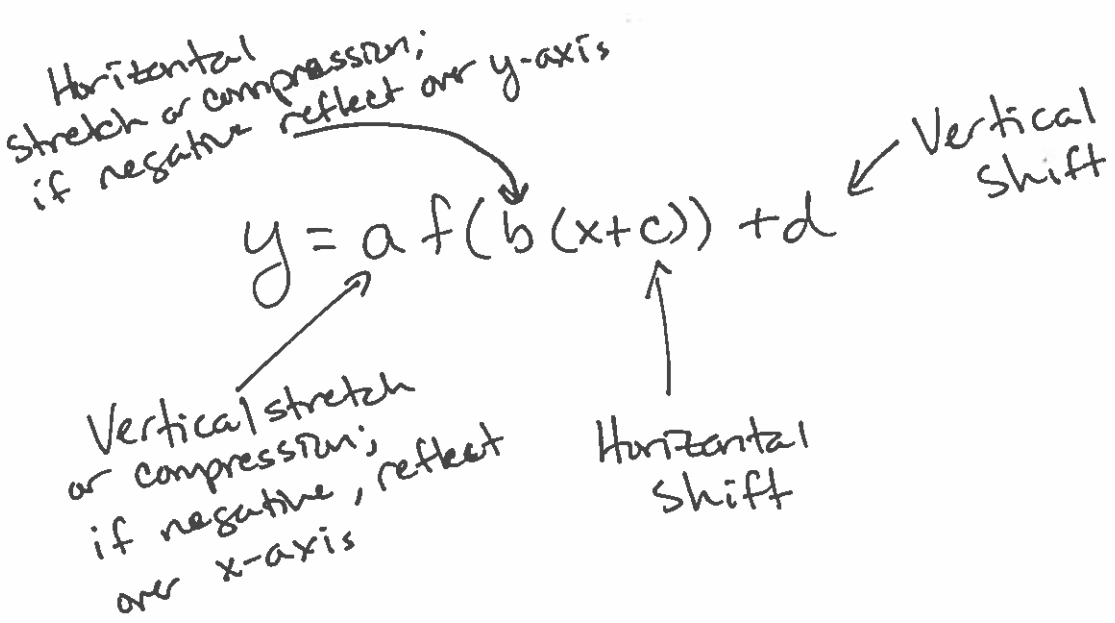
cosine: $\cos\theta = \frac{x}{r}$

tangent: $\tan\theta = \frac{y}{x}$

cosecant: $\csc\theta = \frac{r}{y} = \frac{1}{\sin\theta}$

secant: $\sec\theta = \frac{r}{x} = \frac{1}{\cos\theta}$

cotangent: $\cot\theta = \frac{x}{y} = \frac{1}{\tan\theta}$



$$f(x) = A \sin\left(\frac{2\pi}{B}(x-C)\right) + D$$

$|A|$ is the amplitude

$|B|$ is the period

C is a horizontal shift

D is a vertical shift