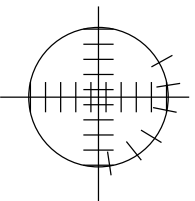


Tear off the ruler and mark it so that the big circle has radius 1. That is what "unit circle" means.

Then mark an angle of, say, .3 on the circle, using your ruler. Measuring angles with a ruler is what "radians" are about.

Then measure the sine and cosine of your angle, and compare them to what your calculator says.

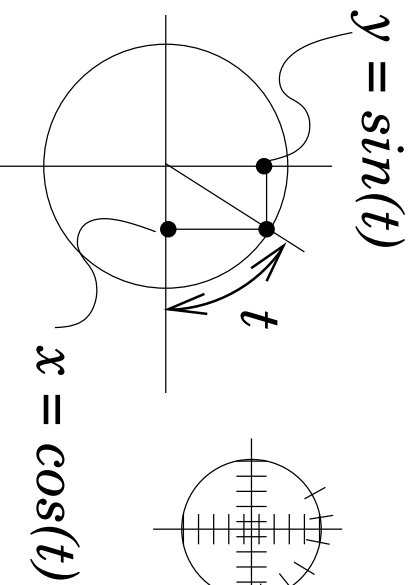
Mark several x , y , and t values on the big circle, like the scruffy little one.



Use several cosine values you find this way,

to sketch part of the graph of the cosine.

Measure all the way around the circle to see why the cosine is periodic.



t	$\cos(t)$	$\sin(t)$
.3		
0		
$\pi=3.1$		