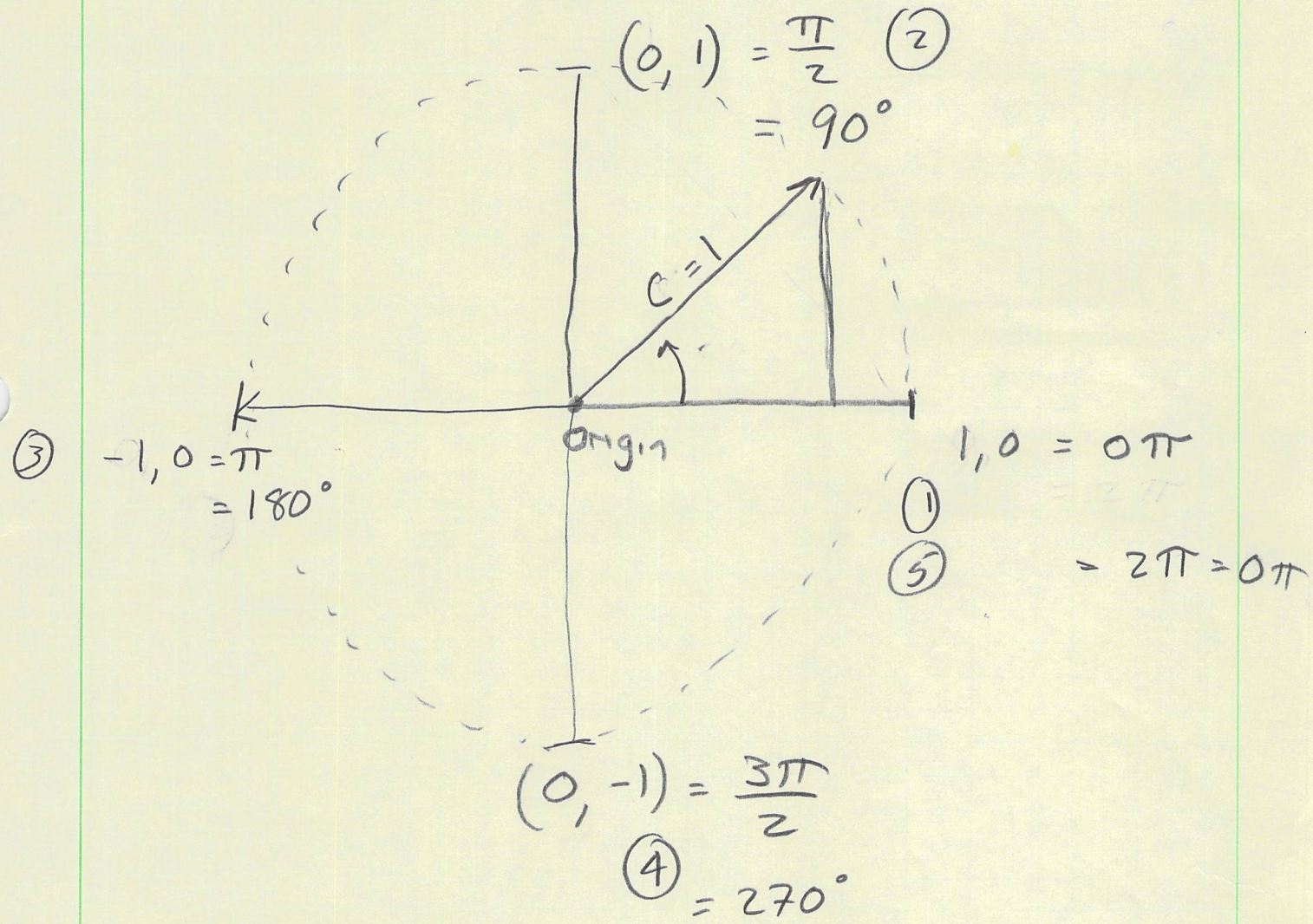
Are Radians Scary? yes if

1) you fear new knowledge;
2) If you can't draw



$$\vec{C}_x = C \sin\theta = \frac{opp}{hyp}$$

$$\vec{C}_y = C \cos\theta = \frac{adj}{hyp}$$

find opp's, adj for 1-4

Position	y axis opp	x axis adj	θ, deg	θ, rad
1	0	1	0	0
2	1	0	90	$\pi/2$
3	0	−1	180	π
4	−1	0	270	$\frac{3\pi}{2}$
5	0	1	360	$2\pi, \emptyset$
6	$\frac{\sqrt{2}}{2}$	$\sqrt{2}$	45°	$\frac{\pi}{4}$

[If legs are the same]

$$\vec{C} = (A^2 + B^2)^{\frac{1}{2}}$$

$$1 = (2A^2)^{\frac{1}{2}}$$

$$1 = 2A^2$$

$$\frac{1}{2} = A^2$$

$$\sqrt{\frac{1}{2}} = A = B$$

Circular Motion

Centrifugal motion