

The Plan:

Thursday: Test over Chapter 6 Material, mainly.

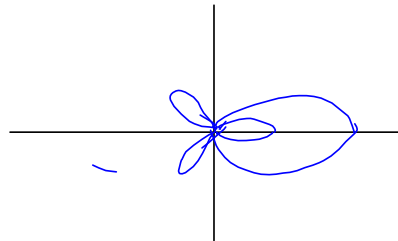
Will have something like rectangular AND polar graph of

$f(x) = a \cos(bx) + c$ (rectangular) and

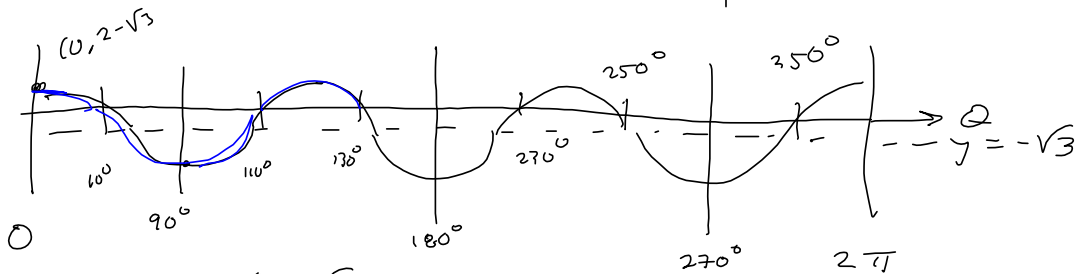
$r = a \cos(b\theta) + c$

Questions?

I'm partial to $b = 3$.

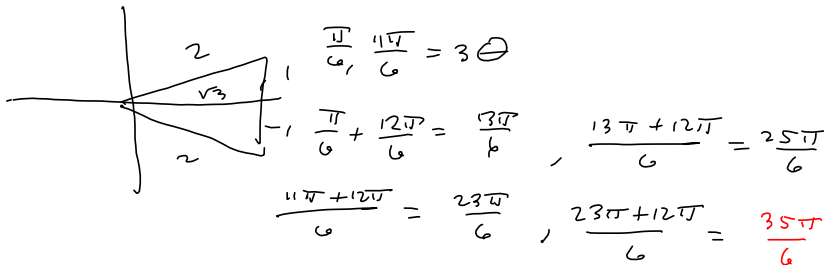


$f(\theta) = 2 \cos(3\theta) - \sqrt{3}$



$2 \cos 3\theta = \sqrt{3}$
 $\cos 3\theta = \frac{\sqrt{3}}{2}$

Need to run out to $3 \cdot 2\pi = 6\pi$
 $\approx 18, \dots$



$\frac{\pi}{6}, \frac{11\pi}{6}, \frac{13\pi}{6}, \frac{23\pi}{6}, \frac{25\pi}{6}, \frac{35\pi}{6} = 3\theta \Rightarrow$

$\theta = \frac{\pi}{18}, \frac{11\pi}{18}, \frac{13\pi}{18}, \frac{23\pi}{18}, \frac{25\pi}{18}, \frac{35\pi}{18}$
 $= 10^\circ, 110^\circ, 130^\circ, 230^\circ, 250^\circ, 350^\circ$

Meh. 3θ is tough under time controls.

Be a good rectangular graph problem. A bit tough to do one with 6 loops for the student, though. So probably a 2-theta problem. 2 or 4 petals/loops.