

1. Convert  $(2, \frac{\pi}{3})$  to rectangular form.
2. Convert  $(6, -3)$  to polar form.
3. Convert  $x^2 + y^2 - 6x + 2 = 0$  to polar form.
4. Convert  $r = 2 \sec \theta$  to rectangular form.
5. Graph the following:
  - a.  $r = \sin 3\theta$
  - b.  $r = \cos 2\theta$
  - c.  $r = 2 \sin \theta$
  - d.  $r = 3 \cos \theta$
  - e.  $r = \theta$
  - f.  $r = 1 - \cos \theta$
  - g.  $\theta = \frac{\pi}{3}$
  - h.  $r = 1 + \cos \theta$
  - i.  $r = 2 - 4 \sin \theta$
  - j.  $r = 3 + 6 \cos \theta$
  - k.  $r = -1 - 2 \cos \theta$
  - l.  $r = 1 + 2 \sin \theta$
6. What is the area inside the curve  $r = 2 \cos \theta$  and outside the curve  $r = 1$ ? Graph and shade the region.

LOOK OVER THE SEQ & SERIES WS POSTED ON 4/16! I will be posting solution videos soon.