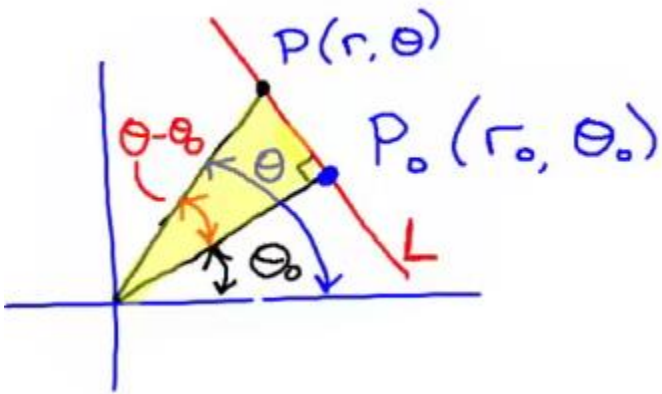


Conics in Polar Coordinates



Ex.  $\left(2, \frac{\pi}{3}\right)$

Circles

If the circle passes through the origin.

If  $\theta_0 = 0$

If  $\theta_0 = \frac{\pi}{2}$

If  $\theta_0 = \pi$

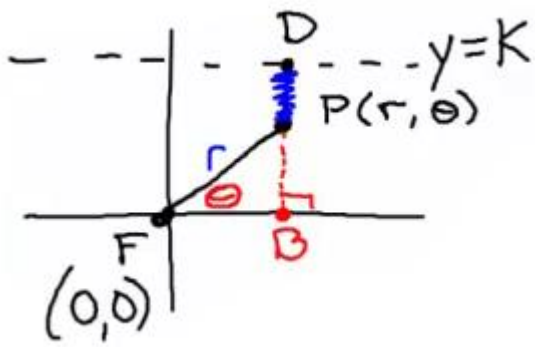
If  $\theta_0 = \frac{3\pi}{2}$

$e = 0$

$0 < e < 1$

$e = 1$

$e > 1$



$$\text{Ex. } e = \frac{3}{2} \quad x = 2$$

$$\text{Ex. } r = \frac{25}{10 + 10 \cos \theta}$$

Ellipses

Center to B

$$\text{Ex. } e = \frac{1}{3} \quad y = 6$$