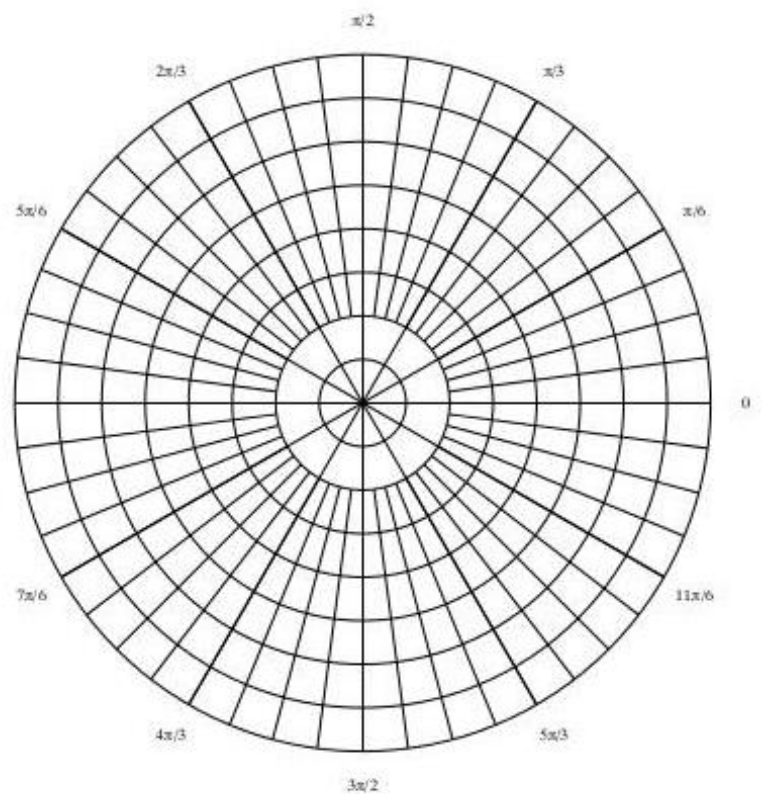


10.8 Graphing Conic Sections on a Polar Graph

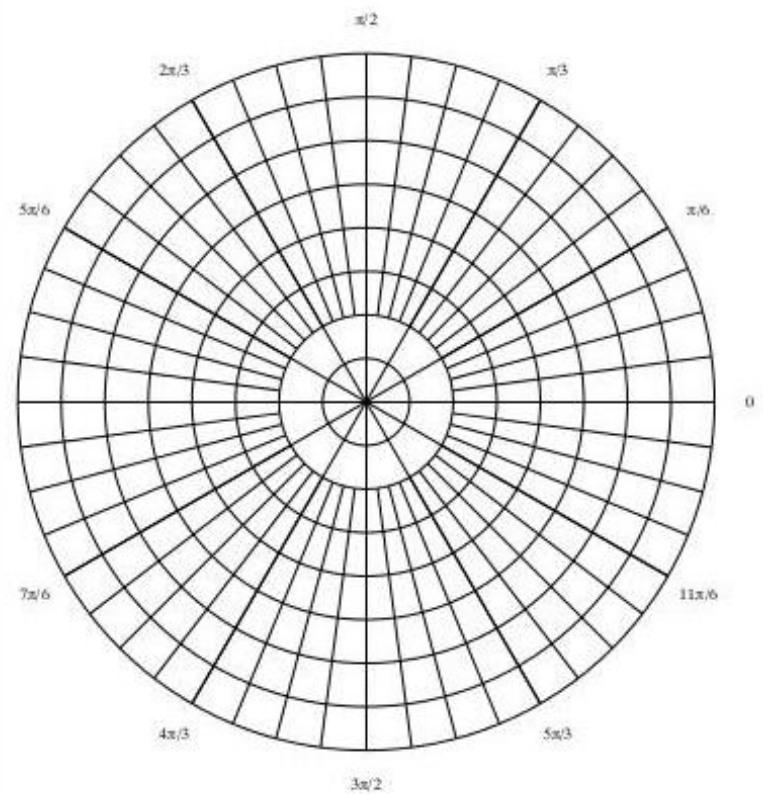
Graph the following equations. Find the distance to the directrix and sketch it on the graph.

1. Graph $r = \frac{6}{1+\sin\theta}$ and label the focus (pole).

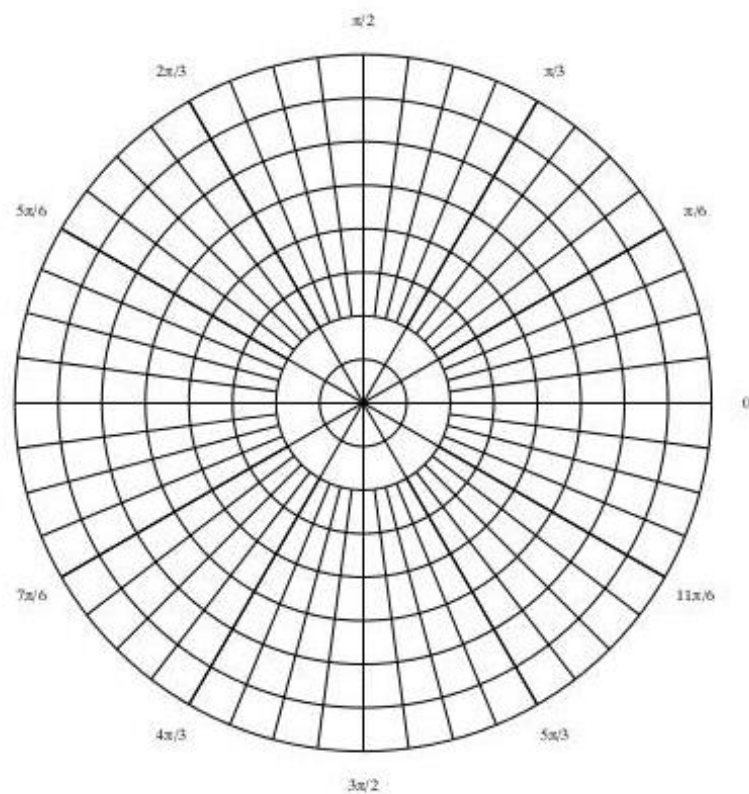


2. Graph $r = \frac{4}{3-2\cos\theta}$.

The pole is a focus. Find the other.



3. Graph $r = \frac{-3}{2+4\sin\theta}$.
Find vertices and both foci



Write equations given the following information:

4. Parabola with a horizontal directrix and vertex at $(\frac{\pi}{2}, -1)$

5. Hyperbola with $e = \frac{3}{2}$ and directrix $x = -1$