

Problems. February 5.

1. Find a polar equation for the circle $(x - 3)^2 + (y + 4)^2 = 25$. Simplify your answer.
2. Convert the equation $r = \tan \theta \sec \theta$ from polar coordinates to Cartesian coordinates. Identify the curve.
3. Sketch the curve $r = \sin 3\theta$.
4. Sketch the curve $r = \cos 4\theta$.