Math 199 CD3 Merit Worksheet 24: Plotting Parametric Equation and Polar Coordinate and More

April 21, 2022

1. Plotting $r = 1 + \cos \theta$

2. Plotting $r = 1 + 2\cos\theta$

3. Find the intersection point of the curve $r^2 = 4\cos(2\theta)$ and $r^2 = 4\sin(2\theta)$

4. Find the area enclosed by the cardioid $r = 1 + \cos \theta$

5. Find the area inside the limacon $r = 4 + 2\cos\theta$.