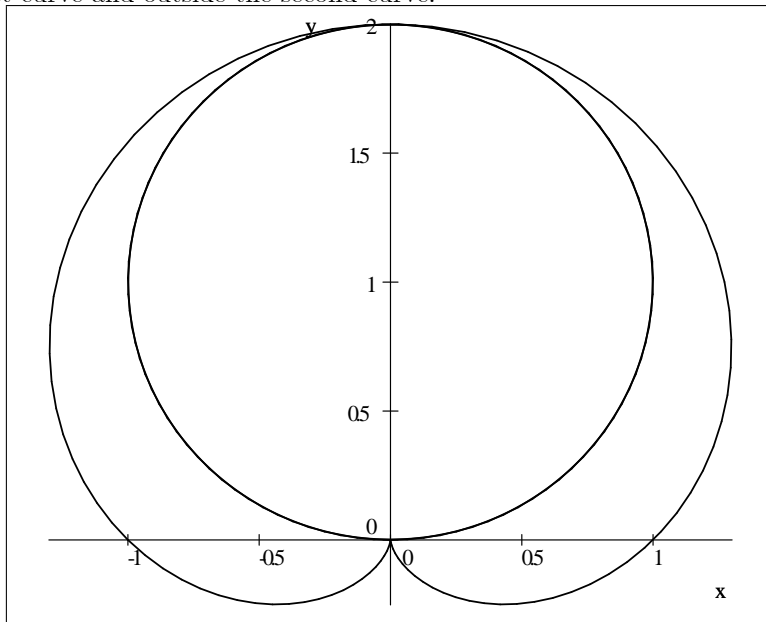


Name:.....Serial#:.....Sec #:.....

Q.1: Graphs of $r = 1 + \sin(\theta)$ and $r = 2 \sin(\theta)$ are shown in the figure. Find the area that lies inside the first curve and outside the second curve.



Q.2: Find equation of the sphere with center $(-4, 2, -1)$ and radius equal to 9. Write name and equations of its intersections with coordinate planes.