Find the area enclosed by the petals of the rose

$$
r=3 \cos 3 \theta
$$



Find the area enclosed by the outer loop of the

$$
\text { limacon } r=1-2 \sin \theta
$$



Find the area common to both the circle
$r=-4 \cos \theta$ and the cardiod $r=\frac{4}{3}-\frac{4}{3} \cos \theta$


Find the area inside the cardiod $r=\frac{4}{3}-\frac{4}{3} \cos \theta$ and outside the circle $r=-4 \cos \theta$


