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1. Find the area enclosed by $r = 3 + 2 \sin \theta$
 2. Find the area enclosed by the spiral $r = e^\theta$, where $\theta \in [0, \pi]$
 3. Find the area of the inner loop of the curve $r = 1 - 2 \sin \theta$
 4. Find the area of the region that lies inside the curve $r = 3 \cos \theta$ and outside the curve $r = 1 + \cos \theta$.
 5. Find the slope of the polar curve $r = e^{\theta/2}$ at the point $(1, 0)$
 6. Find the equation of the tangent line to the curve $r = \sin(2\theta)$ when $\theta = \pi/2$
 7. Find all points where $r = 3 + \sin \theta$ has a horizontal tangent.
 8. Find all points where $r = \sin^3 \theta$ has a vertical tangent.
 9. Set up the integral that gives the length of the curve $r = 3 + \sin \theta$
 10. Find the length of the curve $r = 2^\theta$, $0 \leq \theta \leq \pi/2$