

Area Practice:

Area with Polar Coordinates

1. Find the area inside the inner loop of $r = 3 - 8 \cos \theta$.
2. Find the area inside the graph of $r = 7 + 3 \cos \theta$ and to the left of the y -axis.
3. Find the area that is inside $r = 3 + 3 \sin \theta$ and outside $r = 2$.
4. Find the area that is inside $r = 2$ and outside $r = 3 + 3 \sin \theta$.
5. Find the area that is inside $r = 4 - 2 \cos \theta$ and outside $r = 6 + 2 \cos \theta$.
6. Find the area that is inside both $r = 1 - \sin \theta$ and $r = 2 + \sin \theta$.