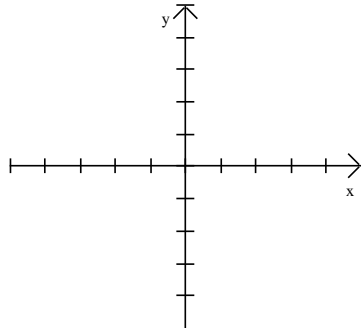


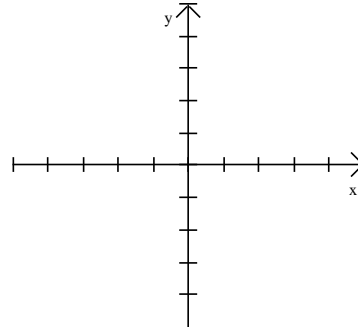
10.5 Polar Area Day 1 Worksheet

For each of the following, sketch a graph, shade the region, and find the area.

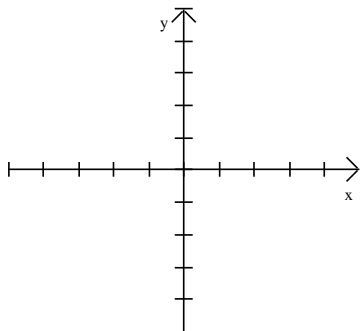
1. one petal of $r = 2 \cos(3\theta)$



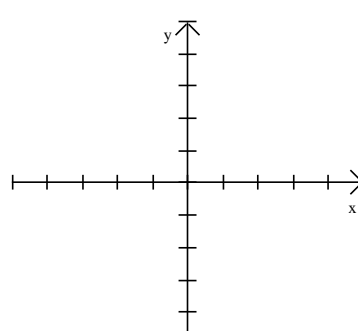
2. one petal of $r = 4 \sin(2\theta)$



3. interior of $r = 2 + 2 \cos \theta$



4. interior of $r = 2 - \sin \theta$



Answers to Worksheet on Polar Area

1. $\frac{\pi}{3}$

2. 2π

3. 6π

4. $\frac{9\pi}{2}$
