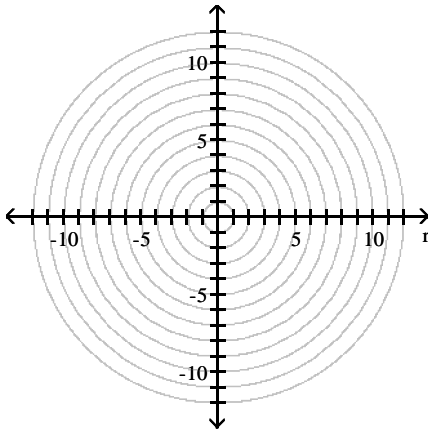
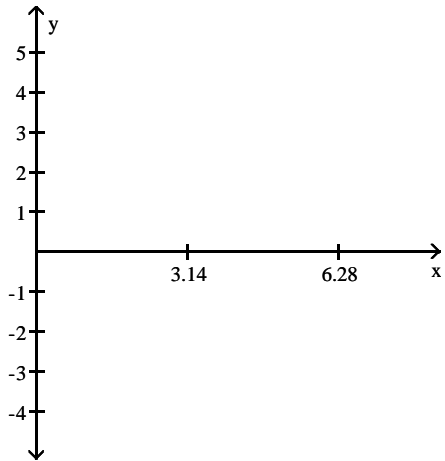


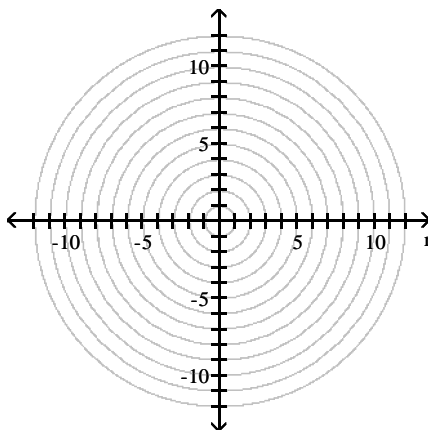
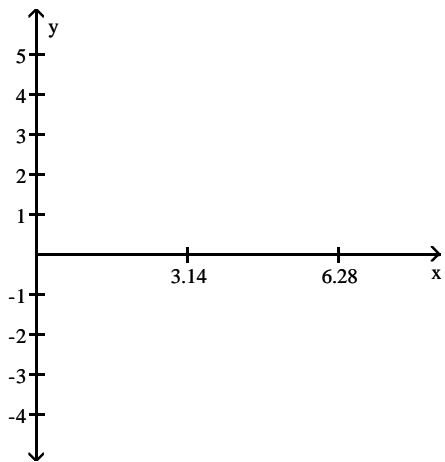
Name \_\_\_\_\_

**Graph the polar equation.**

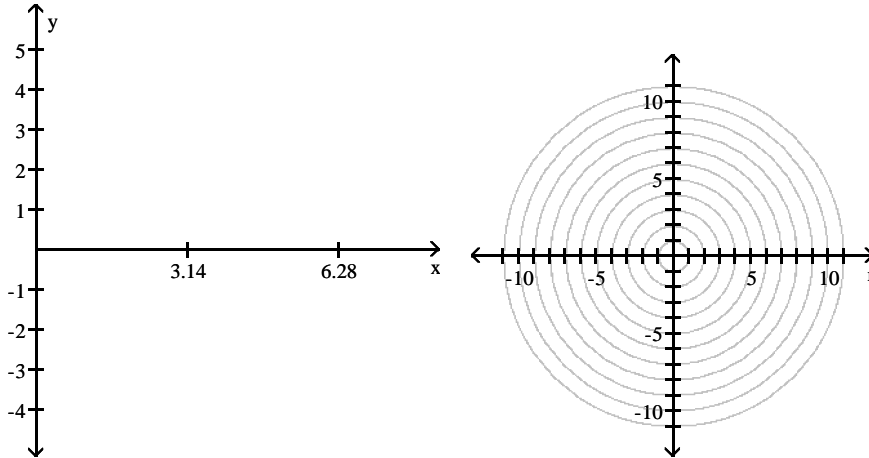
1)  $r = 2(2 + 3 \sin \theta)$



2)  $r = 4 - \cos \theta$



3)  $r = 5 \cos 8\theta$



**Find the area of the specified region.**

4) Inside the limaçon  $r = 7 + 6 \sin \theta$

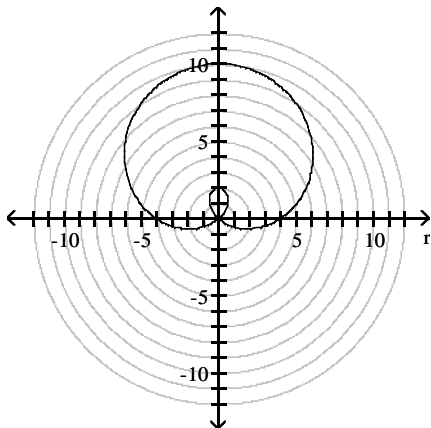
5) Inside one leaf of the four-leaved rose  $r = 5 \sin 2\theta$

6) Inside the smaller loop of the limaçon  $r = 5 + 10 \sin \theta$

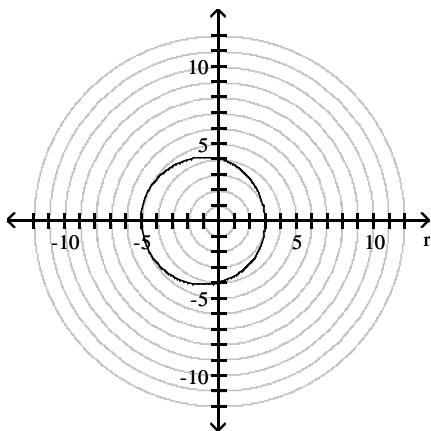
Answer Key

Testname: POLAR WORKSHEET

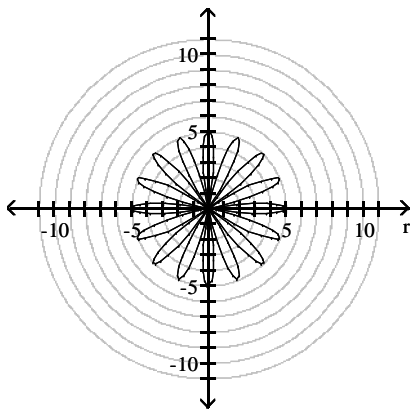
1)



2)



3)



4)  $67\pi$

5)  $\frac{25\pi}{8}$

6)  $\frac{25}{2}(2\pi - 3\sqrt{3})$