Name: ID:

Q1: Sketch the curve $r^2 = \cos(\theta)$ and find the area that is encloses.

Q2 Sketch the two curves and find the area of the region that lies inside both curves.

$$r = \sin\theta \quad ; \quad r = 1 - \sin\theta$$

Q3 Find the area inside the larger loop and outside the smaller loop of the limaçon
$$r = 1 + 2\cos\theta$$