Math 225: Calculus III Quiz 8 Nov. 10/12, 1992 Name:______Section:_____

1. Compute the area of the interior of the cardioid $r = 1 + \sin(\theta)$ in the first quadrant.

2. A solid glass prism is bounded in the first octant by the planes y + z = 1 and x = 2. Compute the total mass of this prism if the density of the glass is given by $\delta = z(1 - y)$.