1. (5 points) Find the area in the first quadrant bounded by the curve $r = \theta$, where $\theta$ goes from 0 to $\pi/2$.

2. (10 points) Use Green’s theorem to find the following line integral, where $C$ is the unit circle $x^2 + y^2 = 1$.

$$\oint_C (e^x + 2xy - 1)dx + (e^{-y^2/2} + x^2 + x)dy$$