## Homework 10

Due on April 15 in class.
Exercise Set 4 is on Page 35 in the online notes
www.math.purdue.edu/~zhan1966/teaching/362/diffforms.pdf

1. Prolem 1(b) in Exercise Set 4 in the notes (do this problem by assuming that the curve $C$ is defined as $r=\sin \theta, 0 \leq \theta \leq \pi)$.
2. Prolem 2 in Exercise Set 4 in the notes.
3. Prolem 3 in Exercise Set 4 in the notes with $S$ being oriented with outward normal vectors.
4. Prolem 4 in Exercise Set 4 in the notes.
