## Problem Set 4 Calculus 3 Due 11/18/05

You are encouraged to work in groups of two to four on this assignment and make a single group submission. Each problem is worth 5 points. For full credit indicate clearly how you reached your answer. All work must be legible and submitted on clean paper without ragged edges.

1. Let $\mathbf{F}(x, y)=\langle a, b\rangle$ for some constants $a$ and $b$. Find $\oint_{C} \mathbf{F} \cdot d \mathbf{r}$ using Green's Theorem, where $C$ is any circle.
2. Do problem \#19 in §18.4.
