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.