

## MATH 116-07 QUIZ 13

Surname\ Name:

ID:

**Problem.** Use Green's Theorem to find the counterclockwise circulation and outward flux for the field

$$\mathbf{F} = (y^2 - x^2)\vec{\mathbf{i}} + (x^2 + y^2)\vec{\mathbf{j}}$$

around and across the boundary of the triangle with vertices  $(0, 0)$ ,  $(0, 1)$  and  $(1, 1)$ .