**(Easier) Practice Quiz 8 Calc 3 11/12/2004**

1. Compute $\int_C \left\langle x^2 + y^2, -xy^2 \right\rangle \cdot d\vec{r}$ for $C$ the positively oriented rectangle having vertices (0, 0) (1, 0), (1, 5), and (0, 5).

**(Harder) Practice Quiz 8 Calc 3 11/12/2004**

1. Compute $\int_C \vec{F} \cdot d\vec{r}$ for the vector field $\vec{F}(x,y) = \langle -x^2 y, xy^2 \rangle$ where $C$ is the boundary of the region in the first quadrant between a circle of radius 1 and a circle of radius 2.