

Math 53, Spring 2000, sections 107 & 109  
Quiz #11, 21 April

Name\_\_\_\_\_

Instructions: You have 25 minutes in which to answer the following two questions. No calculators, notes, or other references may be used.

1. (5 points) Find the value of the integral  $\int_C \mathbf{F} \cdot d\mathbf{r}$ , where  $\mathbf{F}(x, y) = (xy^2 \ln y)\mathbf{i} + (x^2y \ln y)\mathbf{j}$  and  $C$  is the boundary of a rectangle, traversing the points  $(3, 1)$ ,  $(3, 2)$ ,  $(5, 2)$ ,  $(5, 1)$ , and back to  $(3, 1)$ , in that order.

**Hint:** Use Green's Theorem. It reduces to an easy double integral.

2. (5 points) Give me some feedback. I'll eventually get to read your recommendations on the student evaluation forms, but that will be too late for it to make any difference to you. How can I improve? In particular, what can I do over the next month to help you prepare for the final exam?

(Full points for specific suggestions, partial credit for vague complaints, no points for flattery.)