

10 minutes  
5 points for each question  
No calculators allowed

**Math 285.002**  
**Quiz 8**  
**November 10, 2000**

---

Name

Do all of your work directly on this sheet, using the back for scratch if necessary. *Circle your answers, and simplify them as much as possible.*

1. Without converting to polar coordinates, find  $\iint_D 2x^2y \, dA$ , where  $D$  is the region bounded from below by the  $x$ -axis and from above by the circle with center the origin and radius 1.

2. Now redo the first exercise by converting to a double integral in polar coordinates.