

**Math 225: Calculus III**

**Quiz 6** *October 16, 2003*

Name: \_\_\_\_\_

Section: \_\_\_\_\_

1. Find the volume of the solid under the surface defined by  $z = x^3y - 3y^2 + 2$  and above the rectangle  $R = \{(x, y) \mid 0 \leq x \leq 2, -1 \leq y \leq 1\}$ .

2. Calculate the iterated integral  $\int_2^4 \int_0^3 \frac{x}{(1+xy)^2} dy dx$ .