Name:

Math 208, Section 3

Quiz number 7

Show all work. How you get your answer is just as important, if not more important, than the answer itself. If you think it, write it!

Find the integral of the function

$$f(x, y) = xy^2$$

over the region lying in the first quadrant of the x-y plane and lying inside of the circle

$$x^2 + y^2 = 9$$

(see figure).