Name:

1. Evaluate the following integrals:

(a)
$$\int_0^2 \int_0^3 x^2 y^3 \, dx \, dy$$

(b) $\int_0^1 \int_0^{x^2} (x^2 + xy) \, dy \, dx$ (You don't have to sketch the region of integration, but it's not a bad idea to do it anyway.)