

Quiz 4

Name: _____/Id: _____/Section _____ Serial number _____

- 1) Find the volume of the solid under the surface $z = x^5$ and above the region in the (X,Y) plane bounded by $y = x^2$ and $x = y^2$

2) Evaluate the integral $\int_0^1 \int_{x^2}^1 \sqrt{y} \sin(x\sqrt{y}) dy dx$

(Hints: Describe the region of integration by inequalities – by looking at the limits for integration. Then draw it by first drawing its boundaries. After you have identified the region of integration, describe it as a type II region . Change the order of integration to finally compute the integral).