Student ID:

Math 101, Section 15 Spring 2016, Term 152 Quiz 2 Version A Student Name:

Serial Number:

2. (4 pts) Set up (**DO NOT EVALUATE**) the integral that gives the volume of the solid obtained by rotating the region bounded by the curves

$$y = 2\sqrt{2} x^2, \quad x = y^2,$$

about the line x = 2.

Instructions: Show Your Work!

(6 pts) Evaluate the following integrals

 (a)

$$\int_0^{3\pi/2} |\sin(x)| dx,$$

(b)

$$\int \frac{dx}{\sin^2(x)\sqrt{1+\cot x}},$$

Student ID:

Math 101, Section 27 Spring 2016, Term 152 Quiz 2 Version B Student Name:

Serial Number:

2. (4 pts) Set up (**DO NOT EVALUATE**) the integral that gives the volume of the solid obtained by rotating the region bounded by the curves

$$y = 3\sqrt{3} x^2, \quad x = y^2,$$

about the line x = 3.

Instructions: Show Your Work!

(6 pts) Evaluate the following integrals

 (a)

$$\int_0^{3\pi/2} |\cos(x)| dx,$$

(b)

$$\int \frac{dx}{\cos^2(x)\sqrt{1+\tan x}},$$