Student ID:

Student Name:

Serial Number:

Math 102, Section 1
Summer 2017, Term 163
Instructions: Show Your Work!

Quiz 4
Version A

1. (3 pts) Evaluate the following integral, if exists

$$\int_{-\infty}^{0} \frac{3x}{(5x^2+6)^2} dx.$$

2. (3 pts) Evaluate the following integral, if exists

$$\int_{0}^{1} \frac{e^{1/x}}{x^3} dx$$

3. (4 pts) Find the surface area of the solid obtained by rotating the curve

$$y = \sqrt{4-x^2}, \quad 0 \le x \le 1.$$

about x-axis.

Student ID:

Student Name:

Serial Number:

Math 102, Section 4
Summer 2017, Term 163
Instructions: Show Your Work!

Quiz 4
Version B

1. (3 pts) Evaluate the following integral, if exists

$$\int_0^{\infty} \frac{16\tan^{-1}(x)}{1+x^2}dx.$$

2. (3 pts) Evaluate the following integral, if exists

$$\int_{-1}^{0} \frac{e^{1/x}}{x^3}dx$$

3. (4 pts) Find the surface area of the solid obtained by rotating the curve

$$y = \sqrt{4x - x^2}, \quad 1 \leq x \leq 4.$$

about x-axis.