

# Math 2300-013: Quiz 2

Name: \_\_\_\_\_

Score: \_\_\_\_\_

Collaborators:

**Directions:** This take-home quiz will be due at the beginning of class on Tuesday, September 12. You may use your notes, textbook, and colleagues from our class as resources, but your final write-up should be in your own words. If you work with collaborators from our class, please include their names on this quiz.

Evaluate the following integrals:

1.  $\int \sin(\ln(x)) dx$

2.  $\int_0^3 \frac{x^2 - 1}{e^{3x}} dx$

3. 
$$\int \frac{x^3 + 7}{x^2 + 4} dx$$

4. 
$$\int_0^{\pi/4} \sec^3 \theta \tan^5 \theta d\theta$$

5.  $\int x^2 \sqrt{3 - 2x - x^2} dx$

6.  $\int \sec^3 x \, dx$