

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

This quiz covers: 5.3 through 5.6.

**Directions:** Complete all question and **show all applicable work.** Partial credit will be given. All questions are equally weighted.

1.) Evaluate the following integral:

$$\int \sin(x^4)x^3 dx$$

2.) Evaluate the following integral:

$$\int xe^{-x} dx$$

3.) Evaluate the derivative ( $F'(x)$ ) of the following integral (hint: Its fundamental!):

$$F(x) = \int_x^5 \tan(t) dt$$