

**Lab 7 - Chapter 8 Review**

Evaluate the following. Clearly label which methods you used.

1.

$$\int e^{2x} \sin(3x) dx$$

2.

$$\int \tan \theta \sec^4 \theta d\theta$$

3.

$$\int \frac{-12}{x^2 \sqrt{4-x^2}} dx$$

4.

$$\int \frac{x^2}{x^2 + 5x - 24} dx$$

5.

$$\int_1^\infty \frac{\ln x}{x^2} dx$$

6.

$$\lim_{n \rightarrow \infty} 1000 \left(1 + \frac{0.09}{n}\right)^n$$