

Math 251: Pledged Set 10

Due: April 27, 2010

This is a pledged set. Therefore, no outside help from book, calculator, or other people.

1. Evaluate

$$\int_0^{\pi/2} \cos^5 x \, dx$$

2. Evaluate

$$\int x^2 \sqrt{9 - x^3} \, dx$$

3. Evaluate

$$\int \frac{r^2}{r + 4} \, dr$$

using partial fractions.

4. Find

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

5. Evaluate

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