

Math 141
Exam #2
Spring 2011

Name:

1. Integrate: $\int \sec^5 x \, dx$

2. Integrate: $\int \sin^3 x \cos^5 x \, dx$

3. Integrate: $\int \frac{1}{\sqrt{16 + 4x^2}} \, dx$

4. Integrate: $\int \sqrt{9 - 4x^2} \, dx$

5. Integrate: $\int \frac{1}{t^2 - 9} \, dt$

6. Integrate: $\int \frac{y}{(y - 6)(y + 2)^2} \, dy$

7. Integrate: $\int \frac{z + 1}{z(z^2 + 4)} \, dz$

8. Evaluate, or state that the integral diverges: $\int_2^{\infty} \frac{\cos(\pi/x)}{3x^2} \, dx$