

Name:

Exam 3 Guide :: Math 271 :: March 27, 2017

1. Compute

$$\int x^2 + \frac{1}{x^3} + x^{1/3} - \frac{1}{4} dx$$

2. Compute

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

3. Compute

$$\int \frac{x}{\sqrt{x^2 + 10}} dx$$

4. Compute

$$\int \frac{\cos(2x + 1)}{\sqrt{\sin(2x + 1)}} dx$$

5. Compute

$$\int x^2 \cos(5x^3) dx$$

6. Compute

$$\int \frac{x^2 + 1}{x^3} dx$$

7. Compute

$$\int \frac{x^2}{x^3 + 1} dx$$

8. Compute

$$\int \frac{x}{\sqrt{x^2 + 1}} dx$$

9. Compute

$$\int x\sqrt{x^2 + 1} dx$$

10. Compute

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

11. Compute

$$\int \sec^2(x) dx$$

12. Compute

$$\int x \cos(5x^2) dx$$

13. Compute

$$\int x \cos(x^2) \sin(x^2) dx$$