

Math 2413 Assignment
Due: July 3rd at 10 pm

Name _____

Integrate to find the antiderivative. Simplify your answer.

1. $\int x \sin(3x^2 + 1) dx =$

2. $\int \sqrt[5]{x^4} dx =$

3. $\int 3 \sec^2(3x + 7) dx =$

4. $\int (6x^4 + 3) dx =$

5. $\int 5^{2x} dx =$

6. $\int 3e^{4x} (e^{4x} - 7)^4 dx =$

7. $\int \frac{10x - 4}{(5x^2 - 4x - 5)^4} dx =$

8. $\int 3(7x + 1)^4 dx =$

9. $\int \frac{3}{x^6} dx =$

$$10. \quad \int \frac{e^{4x-1}}{3} dx =$$

$$11. \quad \int \frac{5}{5x+3} dx =$$

$$12. \quad \int \frac{3}{\sqrt{16-x^2}} dx =$$

$$13. \quad \int \sqrt{7-3x} dx =$$

$$14. \quad \int x \tan(x^2 + 7) dx =$$

$$15. \quad \int_1^3 (3x^2 + 4x) dx =$$