

Lab Worksheet for October 14, 2021

Practice with u substitution.

Solve the following indefinite integrals.

1. $\int 4x(x^2 + 2) dx$

2. $\int -3 \sin(3x) dx$

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

4. $\int 3x^2 \cos(x^3) dx$

5. $\int \frac{12x^3}{2\sqrt{3x-1}} dx$

6. $\int -2 \cos(x) \sin(x) dx$

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

8. $\int 3x^2 e^{x^3} dx$

$$9. \int \frac{dx+1}{2x^2+x} dx$$

$$10. \int \frac{2x+1}{1+(x^2+x)^2} dx$$