Integration Practice

October 23, 2024

Evaluate the following indefinite integrals:

1. $\int (3x^2 - 8x + 5)\, dx$

2. $\int (x^4 - 2x^3 + 7)\, dx$

3. $\int (\frac{1}{2}x^3 - \frac{3}{4}x^2 + x - 2)\, dx$

4. $\int (12x^5 - 5x^4 + 8x^3 - 2)\, dx$

5. $\int (9x^2 + 4x - 11)\, dx$

6. $\int (x^6 - 3x^4 + x^2 - 5)\, dx$

7. $\int (5x^4 + 2x^2 - 9)\, dx$

8. $\int (x^3 - 7x + 4)\, dx$

9. $\int (10x^5 - 3x^2 + 1)\, dx$

10. $\int 3x^2 (x^3 + 2)^4\, dx$

11. $\int 2x\sqrt{x^2 - 5}\, dx$

12. $\int \cos(x)\sin^2(x)\, dx$

13. $\int (2x + 1)(x^2 + x)^3\, dx$

14. $\int 4x^3 \sqrt[3]{x^4 + 1}\, dx$