

Compute the following integrals:

1. $\int (2x - 3)^{10} dx$

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

3. $\int \frac{2x + 3}{(x - 2)(x + 5)} dx$

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

5. $\int \frac{dx}{x^4 - 1}$

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

7. $\int \cos^5 x dx$

8. $\int \tan^5 x dx$

9. $\int \sin 5x \cos x dx$

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