

Evaluate the following indefinite integrals :

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

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

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

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

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

6. $\int \frac{x + 4}{x^3 + 6x^2 + 9x} dx$

7. $\int \frac{x^5 + 1}{x^3(x + 2)} dx$

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