

1. Evaluate $\int_2^3 \frac{1}{x^2 - 1} dx$.
2. Evaluate $\int \frac{5x + 1}{(2x + 1)(x - 1)} dx$.
3. Evaluate $\int \frac{10}{(x - 1)(x^2 + 9)} dx$.
4. Evaluate $\int \frac{1}{x^3 + 2x^2 + x} dx$.
5. Evaluate $\int \frac{x}{x^2 + x - 2} dx$.
6. Evaluate $\int \frac{x^3 + x^2 + 2x + 1}{(x^2 + 1)(x^2 + 2)} dx$.
7. Evaluate $\int_0^1 \frac{x - 4}{x^2 - 5x + 6} dx$.
8. Evaluate $\int \frac{2x + 4}{(x + 6)(x - 2)} dx$ using two different methods.