

AP Calculus BC
More substitution practice

Evaluate

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

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

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

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

5. $\int \frac{1}{1+\sqrt{3x}} dx$

6. $\int \frac{1-\sqrt{x}}{1+\sqrt{x}} dx$

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

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

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

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

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

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