

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

2. $\int t^2 \sqrt[3]{t^3 - 1} dt$

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

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

5. $\int \left(\frac{1}{3x-1} - \frac{1}{3x+1} \right) dx$

6. $\int x \left(1 + \frac{1}{x} \right)^3 dx$

7. $\int \sec(4x) dx$

8. $\int \frac{\sin x}{\sqrt{\cos x}} dx$

9. $\int \csc^2 x e^{\cot x} dx$

10. $\int (\tan x) [\ln(\cos x)] dx$

11. $\int \frac{1 + \cos \alpha}{\sin \alpha} d\alpha$

12. $\int \frac{2}{3(\sec x - 1)} dx$

$$13. \int \frac{e^{1/t}}{t^2} dt$$

$$14. \int \frac{5}{3e^x - 2} dx$$

$$15. \int \cot^2\left(\frac{x}{2}\right) dx$$

$$16. \int \sec(2x) \tan(2x) 2^{\sec(2x)} dx$$

17. $\int e^{x+e^x} dx$

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

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

20. $\int \frac{e^{\tan^{-1}x}}{1+x^2} dx$