

Basic Antidifferentiation Techniques

1. $\int y^{-4} dy$

2. $\int z^{-6} dz$

3. $\int v^{\frac{2}{3}} dv$

4. $\int y^{\frac{3}{4}} dy$

5. $\int 4 dx$

6. $\int dx$

7. $\int 4 \cos y dy$

8. $\int x^{-\frac{3}{2}} dx$

9. $\int t^{-\frac{5}{4}} dt$

10. $\int \sqrt[3]{t} dt$

11. $\int (6 \sec^2 y + \sin y) dy$

12. $\int (8x^3 - 6x^2 + 4x - 1) dx$

13. $\int \frac{dz}{\sqrt[5]{z}}$

14. $\int \left(\frac{9}{y^4} - \frac{8}{y^3} \right) dy$

15. $\int (5 \sin x + \csc x \cot x) dx$

16. $\int (6x^2 + 6x - 2) dx$

17. $\int \frac{dy}{\cos^2 y}$

18. $\int \sqrt{z}(1 - z^2) dz$

19. $\int \left(2y - \frac{3}{y^2} \right) dy$

20. $\int \frac{dt}{\sec t}$

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

22. $\int (2\sqrt[3]{y} - \sqrt{y}) dy$

23. $\int d\theta$

24. $\int \left(t^4 - \frac{1}{t^4} + \sqrt[4]{t} \right) dt$

25. $\int \frac{\sin 2\theta}{\sin \theta} d\theta$

26. $\int \frac{1+u}{\sqrt{u}} du$

27. $\int \frac{dy}{9y^2}$

28. $\int (3 \csc^2 x + 2 \sec^2 x) dx$

29. $\int \sqrt{x}(4x^2 + 3x) dx$

30. $\int 5\pi dx$