

24. $\int \sinh x \, dx = \cosh x$
25. $\int \cosh x \, dx = \sinh x$
26. $\int \tanh x \, dx = \log |\cosh x|$
27. $\int \coth x \, dx = \log |\sinh x|$
28. $\int \operatorname{sech} x \, dx = \arctan (\sinh x)$
29. $\int \operatorname{csch} x \, dx = \log \left| \tanh \frac{x}{2} \right| = -\frac{1}{2} \log \frac{\cosh x + 1}{\cosh x - 1}$
30. $\int \sinh^2 x \, dx = \frac{1}{4} \sinh 2x - \frac{1}{2} x$
31. $\int \cosh^2 x \, dx = \frac{1}{4} \sinh 2x + \frac{1}{2} x$
32. $\int \operatorname{sech}^2 x \, dx = \tanh x$
33. $\int \sinh^{-1} \frac{x}{a} \, dx = x \sinh^{-1} \frac{x}{a} - \sqrt{x^2 + a^2} \quad (a > 0)$
34. $\int \cosh^{-1} \frac{x}{a} \, dx = \begin{cases} x \cosh^{-1} \frac{x}{a} - \sqrt{x^2 - a^2} & \left[\cosh^{-1} \left(\frac{x}{a} \right) > 0, a > 0 \right] \\ x \cosh^{-1} \frac{x}{a} + \sqrt{x^2 - a^2} & \left[\cosh^{-1} \left(\frac{x}{a} \right) < 0, a > 0 \right] \end{cases}$
35. $\int \tanh^{-1} \frac{x}{a} \, dx = x \tanh^{-1} \frac{x}{a} + \frac{a}{2} \log |a^2 - x^2|$
36. $\int \frac{1}{\sqrt{a^2 + x^2}} \, dx = \log (x + \sqrt{a^2 + x^2}) = \sinh^{-1} \frac{x}{a} \quad (a > 0)$
37. $\int \frac{1}{a^2 + x^2} \, dx = \frac{1}{a} \arctan \frac{x}{a} \quad (a > 0)$
38. $\int \sqrt{a^2 - x^2} \, dx = \frac{x}{2} \sqrt{a^2 - x^2} + \frac{a^2}{2} \arcsin \frac{x}{a} \quad (a > 0)$
39. $\int (a^2 - x^2)^{3/2} \, dx = \frac{x}{8} (5a^2 - 2x^2) \sqrt{a^2 - x^2} + \frac{3a^4}{8} \arcsin \frac{x}{a} \quad (a > 0)$
40. $\int \frac{1}{\sqrt{a^2 - x^2}} \, dx = \arcsin \frac{x}{a} \quad (a > 0)$
41. $\int \frac{1}{a^2 - x^2} \, dx = \frac{1}{2a} \log \left| \frac{a+x}{a-x} \right|$
42. $\int \frac{1}{(a^2 - x^2)^{3/2}} \, dx = \frac{x}{a^2 \sqrt{a^2 - x^2}}$
43. $\int \sqrt{x^2 \pm a^2} \, dx = \frac{x}{2} \sqrt{x^2 \pm a^2} \pm \frac{a^2}{2} \log |x + \sqrt{x^2 \pm a^2}|$
44. $\int \frac{1}{\sqrt{x^2 - a^2}} \, dx = \log |x + \sqrt{x^2 - a^2}| = \cosh^{-1} \frac{x}{a} \quad (a > 0)$
45. $\int \frac{1}{x(a+bx)} \, dx = \frac{1}{a} \log \left| \frac{x}{a+bx} \right|$
46. $\int x \sqrt{a+bx} \, dx = \frac{2(3bx - 2a)(a+bx)^{3/2}}{15b^2}$