

SN	$\frac{d}{dx}[F(x) + c] = f(x)$	$\int f(x) dx = F(x) + c$
1	$\frac{d}{dx}(x^n) = nx^{n-1}$	$\int x^n dx = \frac{x^{n+1}}{n+1} + c [n \neq -1]$
2	$\frac{d}{dx}(x) = 1, \frac{d}{dx}(c) = 0$	$\int dx = x + c$
3	$\frac{d}{dx}(\ln x) = \frac{1}{x}; (x > 0)$	$\int \frac{1}{x} dx = \ln x + c$
4	$\frac{d}{dx}(e^{mx}) = me^{mx}$	$\int e^{mx} dx = \frac{1}{m} e^{mx} + c$
5	$\frac{d}{dx}(e^x) = e^x$	$\int e^x dx = e^x + c$
6	$\frac{d}{dx}\left(\frac{a^x}{\ln a}\right) = a^x$	$\int a^x dx = \frac{a^x}{\ln a} + c$
7	$\frac{d}{dx}(\sin x) = \cos x$	$\int \cos x dx = \sin x + c$
8	$\frac{d}{dx}(\cos x) = -\sin x$	$\int \sin x dx = -\cos x + c$
9	$\frac{d}{dx}(\sin mx) = m \cos mx$	$\int \cos mx dx = \frac{1}{m} \sin mx + c$
10	$\frac{d}{dx}(\cos mx) = -m \sin mx$	$\int \sin mx dx = -\frac{1}{m} \cos mx + c$
11	$\frac{d}{dx}(\tan x) = \sec^2 x$	$\int \sec^2 x dx = \tan x + c$
12	$\frac{d}{dx}(\cot x) = -\operatorname{cosec}^2 x$	$\int \operatorname{cosec}^2 x dx = -\cot x + c$
13	$\frac{d}{dx}(\sec x) = \sec x \tan x$	$\int \sec x \tan x dx = \sec x + c$
14	$\frac{d}{dx}(\operatorname{cosec} x) = -\operatorname{cosec} x \cot x$	$\int \operatorname{cosec} x \cot x dx = -\operatorname{cosec} x + c$
15	$\frac{d}{dx}(\sin^{-1} x) = \frac{1}{\sqrt{1-x^2}}$	$\int \frac{1}{\sqrt{1-x^2}} dx = \sin^{-1} x + c$
16	$\frac{d}{dx}(\tan^{-1} x) = \frac{1}{1+x^2}$	$\int \frac{1}{1+x^2} dx = \tan^{-1} x + c$
17	$\frac{d}{dx}(\sec^{-1} x) = \frac{1}{x\sqrt{x^2-1}}$	$\int \frac{1}{x\sqrt{x^2-1}} dx = \sec^{-1} x + c$
18	$\frac{d}{dx}(\cos^{-1} x) = -\frac{1}{\sqrt{1-x^2}}$	$\int \frac{1}{\sqrt{1-x^2}} dx = -\cos^{-1} x + c$
19	$\frac{d}{dx}(\cot^{-1} x) = -\frac{1}{1+x^2}$	$\int \frac{1}{1+x^2} dx = -\cot^{-1} x + c$
20	$\frac{d}{dx}(\operatorname{cosec}^{-1} x) = -\frac{1}{x\sqrt{x^2-1}}$	$\int \frac{1}{x\sqrt{x^2-1}} dx = -\operatorname{cosec}^{-1} x + c$
21	$\frac{d}{dx}(\sqrt{x}) = \frac{1}{2\sqrt{x}}$	$\int \frac{1}{\sqrt{x}} dx = 2\sqrt{x} + c$
	$\int \frac{dx}{a^2 + x^2} = \frac{1}{a} \tan^{-1} \frac{x}{a} + c$	$\int \frac{dx}{\sqrt{a^2 - x^2}} = \sin^{-1} \frac{x}{a} + c$
	$\int \frac{dx}{x\sqrt{x^2 - a^2}} = \frac{1}{a} \sec^{-1} \frac{x}{a} + c$	