SL.NO	DIFFERENTATION	INTEGRATION			
1	$\frac{d}{dx}(constant) = 0$	$\int 0\, dx = c$	5	$\frac{d}{dx}(x^n) = n\, x^{n-1}$	$\int x^n\, dx = \frac{x^{n+1}}{n+1} c$
2	$\frac{d}{dx}(kx) = k$	$\int (k) dx = kx + c$	6	$\frac{d}{dx}(e^x) = e^x$	$\int e^x\ dx = e^x + c$
3	$\frac{d}{dx}(x^2) = 2x$	$\int (x) dx = \frac{(x^2)}{2} + c$	7	$\frac{d}{dx}(a^x) = a^x \log a$	$\int a^x dx = \frac{a^x}{\log a} + c$

4	$\frac{d}{dx}(x^3) = 3x^2$	$\int (x^2)dx = \frac{x^3}{3} + c$	8	$\frac{d}{dx}(\sqrt{x}) = \frac{1}{2\sqrt{x}}$	$\int \frac{1}{\sqrt{x}}\, dx = 2\sqrt{x} + c$
9	$\frac{d}{dx}(\log x) = \frac{1}{x}$	$\int \frac{1}{x} dx = \log\lvert x\rvert + c$	14	$\frac{d}{dx}(cotx) = -cosec^2 x$	$\int cosec^2 x\, dx = -cotx + c$
10	$\frac{d}{dx}\left(\frac{1}{x}\right) = -\frac{1}{x^2}$	$\int \frac{1}{x^2}\ dx = -\frac{1}{x} + c$	15	$\frac{d}{dx}(secx) = secx\ tanx$	$\int secx\ tanx\ dx = secx + c$
11	$\frac{d}{dx}(sinx) = cosx$	$\int cosx\ dx = sinx + c$	16	$\frac{d}{dx}(cosecx) = -cosecx\ cotx$	$\int cosecx\ cotx\, dx = -cosecx + c$

12	$\frac{d}{dx}(cosx) = -sinx$	$\int sinx\, dx = -cosx + c$	17	$\frac{d}{dx}(\log\lvert secx\rvert) = tanx$	$\int tanx\, dx = \log\lvert secx\rvert + c$
13	$\frac{d}{dx}(tanx) = sec^2x$	$\int sec^2x\ dx = tanx + c$	18	$\frac{d}{dx}(\log\lvert sinx\rvert) = cotx$	$\int cotx\ dx = \log\lvert sinx\rvert + c$
19	$\frac{d}{dx}(\log\lvert secx + tanx\rvert) = secx$	$\int secx\, dx = \log\lvert secx + tanx\rvert + c$	21	$\frac{d}{dx}(\sin^{-1}x) = \frac{1}{\sqrt{1-x^2}}$	$\int \frac{1}{\sqrt{1-x^2}}\ dx = \sin^{-1}x + c$

20	$\frac{d}{dx}(\log\lvert cosecx - cotx\rvert) = cosecx$	$\int cosecx\, dx = \log\lvert cosecx - cotx\rvert + c$	22	$\frac{d}{dx}(\tan^{-1} x) = \frac{1}{1+x^2}$	$\int \frac{1}{1+x^2}\, dx = \tan^{-1} x + c$
23	$\frac{d}{dx}(\text{secx}^{-1} x) = \frac{1}{\lvert x\rvert\sqrt{x^2-1}}$	$\int \frac{1}{\lvert x\rvert\sqrt{x^2-1}}\, dx = \text{secx}^{-1} x + c$	24	$\frac{d}{dx}(uv) = uv' + vu'$	$\int uvdx = u\int vdx - \int\left[u'\int vdx\right]dx$