$\int \cos^{-1}\frac{x}{a}\,dx=[\frac{x^2}{2}-\frac{a^2}{4}]\cos^{-1}\frac{x}{a}-\frac{x}{4}\sqrt{(a^2-x^2)}+c$
$\int x\cos^{-1}\frac{x}{a}\,dx=[\frac{x^2}{2}-\frac{a^2}{4}]\cos^{-1}\frac{x}{a}-\frac{x}{4}\sqrt{(a^2-x^2)}+c$
$\int x^2\cos^{-1}\frac{x}{a}\,dx=\frac{x^3}{3}\cos^{-1}\frac{x}{a}-\frac{1}{9}(x^2+2a^2)\sqrt{(a^2-x^2)}+c$
$\int\frac{(\cos^{-1}\frac{x}{a})}{x}\,dx=\frac{\pi}{2}\ln x-\frac{x}{a}-\frac{1}{2.3.3}*(\frac{x^3}{a^3})-\frac{1.3}{2.4.5.5}(\frac{x^5}{a^5})-\frac{1.3.5}{2.4.6.7.7}(\frac{x^7}{a^7})-\ldots+c$
$\int\frac{(\cos^{-1}\frac{x}{a})}{x^2}\,dx=\frac{-1}{x}\cos^{-1}\frac{x}{a}+\frac{1}{a}\ln\frac{(a+\sqrt{(a^2-x^2)})}{x}+c$

Integrals Containing $\tan^{-1}$ ***&*** $\cot^{-1}$ ***Function***

$\int \tan^{-1}\frac{x}{a}\,dx=x\tan^{-1}\frac{x}{a}-\frac{a}{2}\ln(a^2+x^2)+c$
$\int x\tan^{-1}\frac{x}{a}\,dx=\frac{1}{2}(x^2+a^2)\tan^{-1}\frac{x}{a}-\frac{ax}{2}+c$
$\int x^2\tan^{-1}\frac{x}{a}\,dx=\frac{x^3}{3}\tan^{-1}\frac{x}{a}-a\frac{x^2}{6}+\frac{a^3}{6}\ln(x^2+a^2)+c$
$\int x^n\tan^{-1}\frac{x}{a}\,dx=\frac{(x^{(n+1)})}{(n+1)}\tan^{-1}\frac{x}{a}-\frac{a}{(n+1)}\int(\frac{x^{(n+1)}}{(a^2+x^2)})$
$\int\frac{(\tan^{-1}\frac{x}{a})}{x}\,dx=\frac{x}{a}-\frac{x^3}{(3^2a^5)}+\frac{x^5}{(5^5a^5)}-\frac{x^7}{(7^2a^2)}+..+c$
$\int\frac{(\tan^{-1}\frac{x}{a})}{x^2}\,dx=\frac{-1}{x}\tan^{-1}\frac{x}{a}-\frac{1}{2a}\ln\frac{(a^2+x^2)}{x^2}+c$
$\int\frac{(\tan^{-1}\frac{x}{a})}{x^n}\,dx=\frac{-1}{((n-1)x^{(n-1)})}\tan^{-1}\frac{x}{a}+\frac{a}{(n-1)}\int\frac{dx}{(x^{(n-1)}(a^2+x^2))}$