

Table of Integrals – Inverse Trigonometric Functions
(Note: '+ C' is omitted.)

$$\int \sin^{-1} x \, dx = x \sin^{-1} x + \sqrt{1 - x^2}$$

$$\int \cos^{-1} x \, dx = x \cos^{-1} x - \sqrt{1 - x^2}$$

$$\int \tan^{-1} x \, dx = x \tan^{-1} x - \frac{1}{2} \ln(1 + x^2)$$

$$\int \cot^{-1} x \, dx = x \cot^{-1} x + \frac{1}{2} \ln(1 + x^2)$$

$$\int \sec^{-1} x \, dx = x \sec^{-1} x - \frac{x}{|x|} \ln \left| x + \sqrt{x^2 - 1} \right|$$

$$\int \csc^{-1} x \, dx = x \csc^{-1} x + \frac{x}{|x|} \ln \left| x + \sqrt{x^2 - 1} \right|$$