

Derivatives of Inverse Trigonometric Functions

$$(f^{-1})'(x) =$$

Let $f(x) = \sin x$

Another way

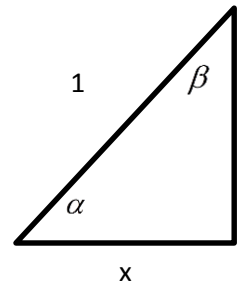
$$f(x) = \tan x$$

$$f(x) = \sec x$$

Math 142 – Calculus 2
Section 7.6 Video Worksheet

Let $\alpha = \cos^{-1} x$

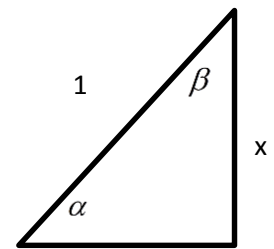
Name _____



$$\frac{d}{dx}(\cot^{-1} x) =$$

$$\frac{d}{dx}(\csc^{-1} x) =$$

$$\alpha + \beta$$



Integrals

$$\int \frac{du}{\sqrt{a^2 - u^2}} =$$

$$\int \frac{du}{a^2 + u^2} =$$

$$\int \frac{du}{u\sqrt{u^2 - a^2}} =$$