Name: _____ Date: _____

Learning Goal 3.5	Using the last derivative rules (for now).

More Questions

Derivatives of Inverse Trigonometric Functions

$\frac{d}{dx}(\sin^{-1} x) =$ $\frac{d}{dx}(\cos^{-1} x) =$ $\frac{d}{dx}(\tan^{-1} x) =$

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

Example Differentiate.

a. $f(x) = \log_2(\sin^{-1}(x^2 - 3x))$

b. $\cos^{-1}(xy) = x^2$

c. $f(x) = \csc^{-1}(5x^2 + 1)$

d. $g(x) = \sqrt{e^{\cos^{-1} x}}$

e. $\tan^{-1}(x - y) = xy$

f. $h(x) = \cos^{-1}(\log_2 x)$