

## Calculus I – Derivative Practice

Find the derivatives:

1.  $y = \frac{\tan^{-1} x}{1 + x^2}$

2.  $y = \sqrt{\sec^{-1} x} = (\sec^{-1} x)^{1/2}$

3.  $y = x \ln x \sin^{-1} x$

4.  $y = \sqrt[3]{x} + e^x + x^e + \cos^{-1}(x^2)$

5.  $y = \sin(e^{\cot^{-1} x})$