

Review for Homework Quiz

Name _____

Solve the equation:

$$\ln(2x-1) = 3$$

$$e^{3x+1} = 5$$

$$e^{e^x} = 17$$

$$\ln(1+e^{-x}) = 3$$

$$\log_{10}(e^x) = 1$$

$$\ln(x+1) - \ln x = 1$$

Evaluate:

$$\log_5 5^{\sqrt{3}}$$

$$4^{(\log_4 5 + \log_4 6)}$$

$$\log_{10} 1000$$

Find the Derivative:

$$y = x^5 e^{6x}$$

$$y = \ln\left(\frac{\cos x}{3x^2 + 2x}\right)$$

$$y = \ln(\csc 5x)$$

$$y = x^3 \ln(x^4)$$

$$y = e^x \ln x$$

$$y = 2^{-x^2} - 4x^5$$

$$y = 10^{\tan x}$$

$$y = \log_{10}(1+z^2)$$

Use Logarithmic Differentiation to find y'

$$y = x^{\ln x}$$

$$y = (\sin x)^x$$

