

MATH 1850 Sec 011 and 012
CALCULUS I
QUIZ 2
September 7, 2010

Name (Last, First) _____

1. Simplify the expression.

$$2 \ln \sqrt{e}$$

$$2 \ln \sqrt{e} = 2 \ln e^{\frac{1}{2}} = \frac{1}{2} \cdot 2 \ln e = 1$$

2. Solve for y in terms of x .

$$\ln(y - 1) - \ln 2 = x + \ln x$$

$$\ln(y - 1) - \ln 2 = x + \ln x$$

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

$$\ln\left(\frac{y - 1}{2x}\right) = x$$

$$\frac{y - 1}{2x} = e^x$$

$$y - 1 = 2xe^x$$

$$y = 1 + 2xe^x$$