

**Math153.06**

**Date:**

**Name:**

**Score:**

**Quiz 3**

1. Solve the following exponential equations algebraically. Round the results to three decimal places.

a.  $1000e^{-4x} = 75$

b.  $\frac{400}{1 + e^{-x}} = 350$

2. Solve the following logarithmic equations algebraically. Round the results to three decimal places.

a.  $\log_4 x - \log_4(x-1) = \frac{1}{2}$

b.  $\ln \sqrt{x+2} = 1$