

**QUIZ#08 MATH 022 SECTION 12**

Name:

1. Write  $\frac{1}{2} \log(y) - \frac{1}{3} \log(x)$  into one logarithm expression is:
2. Find the exact solution for the equation  $3^x = e^{x+1}$ . Express your answer in terms of nature logarithms.

3. Find the solution to the equation:  
 $\log_2(x) + \log_2(x - 4) = \log_2(x + 24)$