

Name: _____

This quiz covers: 3.1, 3.2, and 3.3.

Directions: Complete all questions and **show all applicable work.** Partial credit will be given. All questions are equally weighted.

1.) (A) Graph the function $y = 3^x$. (B) Using the graph from part A, plot the function $y = 3^{x+2} - 1$. Be sure to write the translations used in words.

2.) Compute $\log_2(16)$.

3.) Expand the following logarithm completely:

$$\log_3 \left(\frac{3(x+5)}{x^2(x+1)} \right)$$