

## Quiz #3

**Directions:** Carefully read each question below and answer to the best of your ability in the space provided. You **MUST** show your work to receive full credit!

1. (5 points) When  $\log y$  is graphed as a function of  $x$ , a straight line results. Determine the functional relationship between  $x$  and  $y$ .

$$(x_1, y_1) = (1, 1) \quad \text{and} \quad (x_2, y_2) = (7, 5).$$

2. (5 points) Consider the relationship  $y = 5 \times 3^{-x/6}$  between the quantities  $x$  and  $y$ . Use a logarithmic transformation to find a linear relationship of the form  $Y = mx + b$  between the given quantities.

Name: \_\_\_\_\_

Section (circle one):            003            004

Question:	1	2	Total
Points:	5	5	10
Score:			