HW 6-4 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Secondary III Date: \_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_

Determine whether the following represent exponential growth or decay

1.  2.  3.  4. 

**Write an exponential function to represent the situation**

5. Initial value = 5, increasing at a rate of 17% per year.

6. Initial value = $4000, decreasing at a rate of 5.5% per year.

**Write an exponential function to represent the situation and answer the question**

7. The 2000 population of Lehi was 26,000, and was increasing at a rate of 8.5% per year. Predict the population of Lehi in 2015.

8. If Hugh invests $1500 at 4% compounded annually, how much money will he have after 7 years?

9. How much money will you have after 6 years if you invest $1000 at 5% interest compounded continuously?

10. How much money will you have after 9 years if you invest $4000 at 3% interest compounded continuously?

