***Presentation Problems***

*Show all models and work on this worksheet.*

*Be sure to label your answers!!*

**Problem 1**

In 1998, the population of a city was 2,000 people. Then each year, for the next five years, the population increased by 4.5%. Write an exponential model to represent the situation. What will the population be in 2002? Write a model and solve the problem using the given time.

**Problem 2**

You buy a used truck for $14,000. It depreciates at a rate of 17% per year for six years. You bought the truck in 2003. Write an exponential model to represent the situation. How much will the truck be worth in 2008?

**Problem 3**

A population of 50 pheasants is released in a wildlife preserve. The population triples each year for three years. Write a model to represent the situation. What will the population be at the end of the third year?

**Problem 4**

Write and solve your own exponential growth and decay problem here. When you create your slide, only type the problem on it. Do not put the answer or any other work on the slide.