Algebra 3-4 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per:\_\_\_\_\_

Practice Work Sample #1 Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Most homes appreciate in value, at varying rates, depending on the home’s location, size and other factors. But if the home is used as a rental, it may actually depreciate. Suppose a house originally costing $150,000 in 1998 depreciates at a rate of 8% per year. Calculate and explain how much the house will be worth in 2013.

Algebra 3-4 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per:\_\_\_\_\_

Practice Work Sample #2 Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In 2010 the value of a car was $24,500. Since this time the value has been decreasing. This relationship can be modeled with either a linear or exponential model. The linear model has a constant decrease of $1100 per year. The exponential model has a decrease of 6% per year. Which model indicates a higher value for the car in 2016?

Algebra 3-4 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per:\_\_\_\_\_

Practice Work Sample #3 Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Post Falls High School in Idaho has 1160 students and is growing by 22 students per year. Richmond High School in Indiana has 1900 students and is shrinking by 1.5% students per year. In 23 years, which school will have a larger population?