Exponential Growth and Decay Word Problems

* Growth =   **Decay =**

Write and exponential statement for Example 1 and 2

Ex 1) A population of 422, 000 increases by 12% each year. What is the population after 5 years.

Ex2) A car bought for $13,000 depreciates at 12% per year. What is the value of the car after 7 years?

Ex4) An initial population of 750 endangered turtles double every 5 years. Find the growth factor and the population of turtle after 15 years.

Ex5) How much of a radioactive kind of radium will be left after 8 days if the half-life is 4 days and you start with 48 grams?

Ex 6) You buy a new computer for $2,100. The computer decreases by 50% annually. When will the computer have a value of $600?

Ex.7) You put $350 in a savings account that earns 3% annual interest compounded yearly. You do not make any deposits or withdrawals; how much will your investment be worth in 4 years?