Algebra 2   Name: _____
Writing Exponential Equations   Period: _____

Find the equation of the exponential function that passes through:

1. $(4, 1536)$ and $(8, 393,216)$ 2. $(2, 196)$ and $(5, 67,228)$ 3. $(3, 540)$ and $(8, 4,199,040)$

4. $(3, 40.5)$ and $(6, 136.6875)$ 5. $(1, 20.16)$ and $(3, 800.1504)$ 6. $(4, 1875)$ and $(7, 234,375)$

7. Susan deposits $1000 in a bank account which credits interest at 5%, compounded annually.
a. Write an explicit formula to represent the amount of money in her bank account after n years.
b. How much does she have in her account after 10 years?

8. The town of Sylineville currently has a population of 2000 and is growing at a rate of 8% each year.
a. Write an explicit formula to represent the population of the town after n years.
b. What is the population after 20 years?
c. What was the population 5 years ago?
d. What was the population 10 years ago?