## Profit Increase

1. From 1990 to 2000, the profit earned by a company increase by about $5.25 \%$ per year. In 1990 the profit was 425 thousand dollars.
a. Write an exponential equation.
b. Find the profit in 1995.
2. Between 1970 and 2000 the population of a city decreased by approximately $6 \%$ each year. In 1970 there was a population of 800,000.
a. Write an exponential equation.
b. Find the population in 1997.
3. At the end of each year a cities population is $90 \%$ of the amount at the beginning of the year. In 1970 there was a population of 800,000 .
a. Write an exponential equation.
b. Find the population in 2003.
