

## 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.