Notes.

Exponential functions are functions whose percent changes are constant!

1. Erza decides to open a bank account with an opening deposit of $1000. Suppose that the account earns an annual interest rate of 6%, compounded annually.
   (a) How much money does the account have $t$ years after it is opened?

   (b) How many years does it take for Erza to have his money doubled?

   (c) If Erza wants to have $1500 after 5 years, how much money should he have deposited at the beginning?

2. The population in a certain area of the country is increasing. In 1995 the population was 100,000, and by 2015 it was 200,000. If the population has been increasing exponentially and continues to do so, what do you expect the population to be $t$ years after 2015?