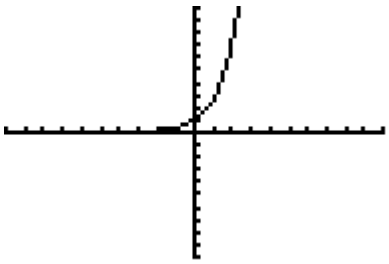
SECTION 6.2: THE NATURAL BASE e

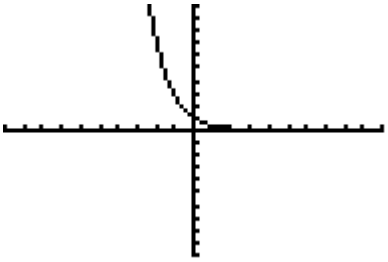
Homework: _____

Exponential Growth



$$y = ae^{x}$$

Exponential Decay



$$y = ae^{-x}$$

Compounded Continuously: Compound interest is paid _____ times per year

$$A = Pe^{rt}$$

You were given $1200 from your last dividend to put in savings. If you earn continuous interest rate of 4%, how much money will you have after 20 years?

A certain bacteria has a half-life of 1 week. If there are 25,000 bacteria at the beginning, how many will there be after 6 weeks?