

Math 130

4.6 – Applications and Models of Exponential Growth and Decay

Compound Interest

Ex 1.

How long will it take for the money in an account that is compounded continuously at 3% interest to double?

Population Growth

Ex 2.

Suppose the world population can be modeled by the function $f(t) = 6.079e^{0.0126t}$, where t is the number of years after 2000, and f is measured in billions of people. In what year will the world population reach 8 billion?

Q: A man rode his horse into town on Tuesday. Two days later he rode home on Tuesday. How is this possible?