Vensim Models for Exponential Functions
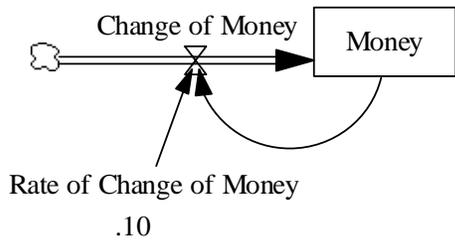
Exponential Growth

Compound Interest Model

You invest $100 at 10% annual interest:

Starting Amount = $100
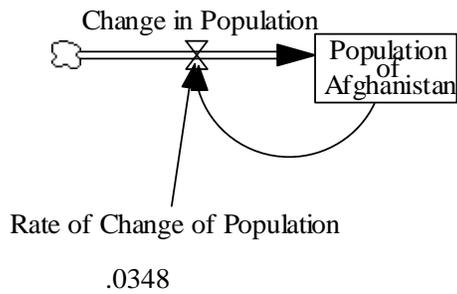
Change of Money → Money

Rate of Change of Money

.10

Exponential Growth

Population Model

Afghanistan has a population of 27 Million and is growing at the rate of 3.48% each ye
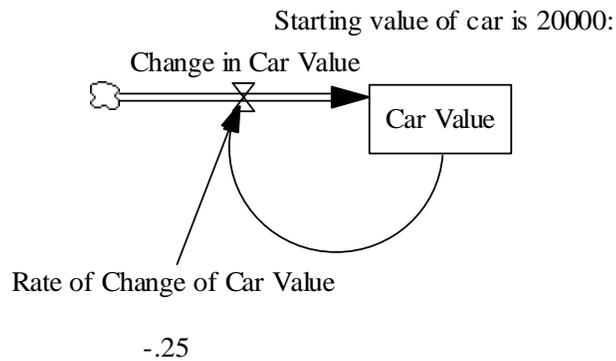
Starting amount is 27:

Change in Population → Population of Afghanistan

Rate of Change of Population

.0348

Vensim Models for Exponential Functions

Exponential Decay

Car Depreciation Model

A car you purchased for $20000 is depreciating by 25% each yea

Starting value of car is 20000:

Change in Car Value

Car Value

Rate of Change of Car Value

-.25

Exponential Decay

Radioactive Decay Model

100 grams of radioactive iodine decays at the rate of 8.2% per da

Starting amount is 100 grams:

Change of radiation

Radioactive Iodine

Rate of change of radiation

-.083