

Paragraph Assignment, Week 11
Due Thursday, 3/30/00 at the start of lab.

Net Worth

Consider the simple constant growth model in the lab. It models the growth of the net worth of a company with the initial value problem

$$\frac{dW}{dy} = \mu W - 200, W(0) = W_0,$$

where $W(t)$ is the net worth (in thousands of \$) over time, time is in years, the fixed annual costs are \$200,000, and the initial capital is W_0 . Sketch a (neat) slope field for this differential equation, and with it, write a paragraph describing the three different types of solutions, what each one means in real world terms, and how you can find the “break even” point for net worth.