

Math 2280-1 and 2250-1
Monday September 8, 2008

Examples 4,5 from §2.1 of the text, pages 83-84.

The Belgian demographer P.F. Verhulst introduced the logistic model around 1840, as a tool for studying human population growth. Our text demonstrates its superiority to the simple exponential growth model, and also illustrates why mathematical modelers must always exercise care, by comparing the two models to actual U.S. population data. here are actual U.S. populations from 1800-1990, see e.g. the table on page 84:

Now compare the two models with the real data, and discuss: