

Dror Bar-Natan: Classes: 2003-04: Math 157 - Analysis I:

## Homework Assignment 10

Assigned Tuesday November 11; due Friday November 21, 2PM, at SS 1071

**Required reading.** All of Spivak Chapter 10.

**To be handed in.** From Spivak Chapter 10: Problems 2 (parts 2, 5, 8, 11, 14, 17), 6 (odd parts), 8, 9 (notice — in problem 9 replace “ $x \leq 0$ ” by “ $x \geq 0$ ”).

**Recommended for extra practice.** From Spivak Chapter 10: Problems 2 (all other parts), 6 (even parts), 7, 15, 18, 33.

**Just for fun.** I took the following picture of the paper handed out by the airline, aboard Air Canada flight 800 to Boston last year:



Denote by  $E(t)$  the overall size of the Canadian economy at time  $t$ . Can you translate the headline above to a simple statement about a certain derivative of  $E(t)$ ? Plot the graph of  $E(t)$  to the best of your understanding given the information in the headline.