Dror Bar-Natan: Classes: 2004-05: Math 157 - Analysis I:

## Homework Assignment 13

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

Required reading. All of Spivak's chapters 13 and 14.
To be handed in. From Spivak Chapter 14: 1 (odd parts) and 2 (odd parts).
Recommended for extra practice. From Spivak Chapter 14: 1 (even parts) and 2 (even parts).

In class review problem(s) (to be solved in class next Tuesday). Problem 2ii of Spivak Chapter 14: Find the derivative of the following function:

$$
F(x)=\int_{3}^{\left(\int_{1}^{x} \sin ^{3} t d t\right)} \frac{1}{1+\sin ^{6} t+t^{2}} d t
$$

(if you feel it is necessary, pretend that you've heard of the function $\sin t$ and that $(\sin t)^{\prime}=\cos t$ ). Just for fun. This homework assignment can read your mind! See the web version for details.

