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

## Homework Assignment 16

Assigned Tuesday January 20; due Friday January 30, 2PM, at SS 1071

Required reading. All of Spivak Chapter 15.

To be handed in. From Spivak Chapter 15: 2 (odd parts), 4 (odd parts), 9, 15, 18.

**Recommended for extra practice.** From Spivak Chapter 15: 2 (even parts), 4 (even parts), 7, 14, 27.

**Just for fun.** Compute the limit  $\lim_{N\to\infty} \cos x \cdot \cos \frac{x}{2} \cdot \cos \frac{x}{4} \cdot \cos \frac{x}{8} \cdots \cos \frac{x}{2^N}$ .



Barry Simon of CalTech with a Calculus Student's most powerful weapons