Homework Assignment 7

Assigned Tuesday October 26; due Friday November 5, 2PM, at SS 1071

Required reading. All of Spivak's Chapter 7.

To be handed in. From Spivak Chapter 7: 1 (even), 2 (even), 10, 17.

Recommended for extra practice. From Spivak Chapter 7: 1 (odd), 2 (odd), 5, 11, 14.

Just for fun.

1. Can you "add new numbers" to the usual set $\mathbb{R}$ of real numbers so as to get a set which satisfies $P1$ through $P12$ yet in which $\mathbb{N}$ is bounded?

2. Player A and player B both have an unlimited supply of 1×1, 1×2, 1×4, 2×2 and 2×4 Lego blocks. They alternate assembling them on a 157×157 Lego base board, but only allowing for single layer construction — so a player cannot place a block on top of a block that's already there. The first player that can't make a move loses. Whom would you rather be, player A or player B?