## Week 38 (6/2/03)

## Sum over 1

- (a) You are given a random number (evenly distributed) between 0 and 1. To this, you add a second such random number. Keep adding numbers until the sum exceeds 1, and then stop. How many numbers, on average, will you need?
- (b) When the sum finally exceeds 1 and the game stops, what is the average result for the sum?