A An MIT student can take a max of 5 courses a term. When he enters MIT he needs 20 courses to graduate. At the end of the first term MIT changes the rules and says he needs 40 courses to graduate, but that the percentage of the course requirement he has already completed will be counted. Then at the end of the third term they change the rules again and say he needs 60 courses to graduate, but that the percentage of the course requirement he has already completed will be counted. And so on - you get the idea. Can this student ever graduate, if so what is the minimum number of terms he needs.

B Compute $\sum_{i=1}^{n} 1/i(i+1)$.

Compute $Lt_{n\to\infty} 1/n + 1/(n+1) + \ldots + 1/2n$.

C Prove that the stacking arrangement shown in class is optimal for producing the most overhang with a given number of books.