


Assignment 1

Policies

Due date: **17:00 Fri. Feb. 8, 2019**

How to submit:

- email to **xingshi.cai@math.uu.se** with title "Combinatorics -- Assignment 1"
- or leave it in my mailbox at math department on the 4-th floor of Angstrom laboratory, near the printer of corridor 1 (it's also very close to the entrance of corridor 7).

Extension policy: unless aliens  invade the earth, there is **no extension**.

Grading method:

- a completed assignment will get 1 point, even with some wrong answers
- partially completed assignments will get 0 point

Assignment questions

For questions asking for a number, give a short explanation of how you get the number. (It's Okay to say you Google it.)

Exercise from the textbook

Section 2.9, exercise 10, 26, 33

Section 3.11, exercise 4, 18

Exercise not from the text book

Problem 1

Find a closed form of

$$\sum_{k=0}^m \frac{\binom{m}{k}}{\binom{n}{k}}$$

Hint: Use one identity given in [lecture 2](#).