## General Mathematics and Computational Science I

## Exercise 1

## September 6, 2005

1. (From Ivanov, p. 2) Prove that a checkerboard with  $2^n \times 2^n$  squares from which one square has been removed can be covered exactly by "triominoes" of the form



- 2. (From Ivanov, p. 2) Into how many pieces do
  - (a) n points subdivide a line;
  - (b) n straight lines subdivide the plane, if no two of the lines are parallel and no three meet in a single point?