

# IOI'94 - Day 1 - Problem 2: The Castle

## Competition Rules

## Problem Statement

Example input and output files from the problem statement (see below for format of output file):

- ┆ [Input](#) / [Output](#) ([4 x 7 castle](#); 5 rooms, largest has 9 modules)

There are 5 tests. Each successfully completed test gives 6 points. Therefore the maximum number of points for this problem is 30. The maximum execution time is 30 seconds per test.

## Test Data

**N.B.** The following test data were not available during the competition. They were used to judge the programs of the competitors after the competition.

The third item of the output (indication of a best wall to remove) may be presented in different ways. Each test output file for this problem contains the first two items and a *list of all* possible presentations of the third item (your program needs to produce only one of these).

1. [Input](#) / [Output](#) ([4 x 5 castle](#); 7 rooms, largest has 6 modules)
2. [Input](#) / [Output](#) ([5 x 10 castle](#); 2 rooms, largest has 44 modules)
3. [Input](#) / [Output](#) ([10 x 10 castle](#); 9 rooms, largest has 36 modules)
4. [Input](#) / [Output](#) ([14 x 15 castle](#); 27 rooms, largest has 55 modules)
5. [Input](#) / [Output](#) ([50 x 50 castle](#); 306 rooms, largest has 905 modules)

## Analysis and Solution