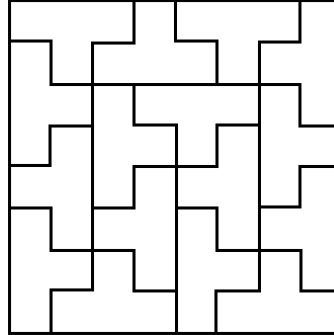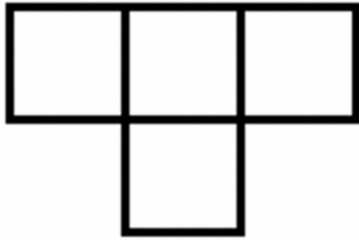# Problem E: Easy Tiling Problem
Time Limit: 5 seconds

Description
Given an *N*x*M* rectangle, compute the number of tilings (complete coverings) with the following piece with 4 blocks (on the left):

Note that the piece can be rotated and flipped but not cut. An example tiling of an 8x8 rectangle is given above right.

Input
A number of of inputs (≤**100**), each line with N and M ($4 \le N \le 24$, $4 \le M \le 10^9$). Additionally, we stipulate the condition that both N and M are integer multiples of 4 (i.e. $4|N$ and $4|M$).

Output
For each input, output the answer modulo **1000000007** on one line.

Sample Input
4 4
4 8

Sample Output
2
6