

A brick wall of a given length and height is to be constructed with bricks of length 3 units and 4 units.

- The length of the wall is expressed in units, and you may assume that the gap between bricks is negligible.
- All bricks have a uniform height, and the height of the wall is given as a number of rows.
- Bricks may not be turned on end in building the wall.
- If two rows of the wall are adjacent, the interior boundaries between bricks in the two rows may not be adjacent (i.e. gaps between bricks may not line up from one row to the next).

For a given length and height, we wish to know how many unique walls can be built. Some examples:

- For a wall of length 7 and height 1, there are 2 ways to build the wall.
- For a wall of length 7 and height 3, there are 2 ways to build the wall.
- For a wall of length 8 and height 1, there is 1 way to build the wall.
- For a wall of length 8 and height 2, there are 0 ways to build the wall.
- For a wall of length 12 and height 3, there are 2 ways to build the wall.
- For a wall of length 13 and height 1, there are 4 ways to build the wall.
- For a wall of length 13 and height 2, there are 2 ways to build the wall.
- For a wall of length 25 and height 1, there are 43 ways to build the wall.
- For a wall of length 25 and height 2, there are 182 ways to build the wall.
- For a wall of length 25 and height 10, there are 298,292,168 ways to build the wall.

Write a program to count the number of ways to build a wall of length 25 and height 13 in your choice of programming language. Submit the resulting count and your source code. You will be evaluated on the accuracy of your answer, the amount of time your solution takes to run and the structure of your code.