THE BLACK AND WHITE QUEENS

Subru and Shanmu are playing Chess. Shanmu wonder about **queens**. So he asked Subru the following question

"*How many ways are there to place a black and a white Queen on an M × N chessboard such that they do not attack each other? The queen can be moved any number of unoccupied squares in a straight line vertically, horizontally, or diagonally.*"

Subru gave the answer in seconds for a given chess board of size M × N (M <= N). Can you repeat the same with your code?

Input Format:

The first line contains the integer "t" which indicates the number of test cases. Each of the following **t** lines contains two integers M and N separated by spaces (M<=N).

Output Format:

Output for each case consists of one line: The number of ways of placing a black and a white queen on a M × N chess board **such that they do not attack each other**.

Constraints: T <= 10000, 2 <= M <=10^10, 2 <= N <= 10^10. And M<=N.

Sample Input:

3

5 5

3 4

2 2

Sample Output:

280

40

0