Given a m \* n matrix grid which is sorted in non-increasing order both row-wise and column-wise.

Return the number of **negative** numbers in grid.

**Example 1:**

**Input:** grid = [[4,3,2,-1],[3,2,1,-1],[1,1,-1,-2],[-1,-1,-2,-3]]

**Output:** 8

**Explanation:** There are 8 negatives number in the matrix.

**Example 2:**

**Input:** grid = [[3,2],[1,0]]

**Output:** 0

**Example 3:**

**Input:** grid = [[1,-1],[-1,-1]]

**Output:** 3

**Example 4:**

**Input:** grid = [[-1]]

**Output:** 1

**Constraints:**

* m == grid.length
* n == grid[i].length
* 1 <= m, n <= 100
* -100 <= grid[i][j] <= 100