6193. Maximum Sum of an Hourglass

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Difficulty:	Medium

You are given an `m x n` integer matrix `grid`.

We define an **hourglass** as a part of the matrix with the following form:

A	B	C
	D	
E	F	G

Return *the **maximum** sum of the elements of an hourglass*.

Note that an hourglass cannot be rotated and must be entirely contained within the matrix.

Example 1:

6	2	1	3
4	2	1	5
9	2	8	7
4	1	2	9

```
Input: grid = [[6,2,1,3],[4,2,1,5],[9,2,8,7],[4,1,2,9]]
Output: 30
Explanation: The cells shown above represent the hourglass with the maximum sum: 6 + 2 + 1 + 2 + 9 + 2 + 8 = 30.
```

Example 2:

1	2	3
4	5	6
7	8	9

```
Input: grid = [[1,2,3],[4,5,6],[7,8,9]]
Output: 35
Explanation: There is only one hourglass in the matrix, with the sum: 1 + 2 + 3 + 5 + 7 + 8 + 9 = 35.
```

Constraints:

- `m == grid.length`

- `n == grid[i].length`
- `3 <= m, n <= 150`
- `0 <= grid[i][j] <=` 10^6

JavaScript

```
const sm = (a) => a.reduce(((x, y) => x + y), 0);

const maxSum = (g) => {
    let n = g.length, m = g[0].length, res = 0;
    for (let i = 0; i + 2 < n; i++) {
        for (let j = 0; j + 2 < m; j++) {
            let a = [g[i][j], g[i][j + 1], g[i][j + 2], g[i + 1][j + 1], g[i + 2][j], g[i + 2][j + 1], g[i + 2][j + 2]];
            res = Math.max(res, sm(a));
        }
    }
    return res;
};
```

□ **Custom Testcase** Use Example Testcases

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