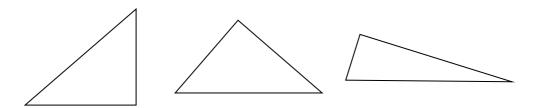
Problem GTriangle Counting

Input: Standard Input
Output: Standard Output



You are given **n** rods of length 1, 2..., n. You have to pick any 3 of them & build a triangle. How many distinct triangles can you make? Note that, two triangles will be considered different if they have at least 1 pair of arms with different length.

Input

The input for each case will have only a single positive integer \mathbf{n} (3<=n<=1000000). The end of input will be indicated by a case with \mathbf{n} <3. This case should not be processed.

Output

For each test case, print the number of distinct triangles you can make.

Sample Input	Output for Sample Input
5	3
8	22
0	

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