Triangle

Input: Standard Input
Output: Standard Output

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How many triangles are there when they have integer length sides and all the sides are between X and Y inclusive. Two triangles differs if their side length set s are different. For example {2,3,3}, {2,3,4} and {2,2,3} are all different triangles. But {5,6,7} and {6,5,7} are not different. In a triangle the sum of smaller two sides are strictly greater than the largest side.

Input

Input starts with an integer $T(1 \leq T \leq 20000)$, the number of test cases. Each test case consists of two integer X and $Y(1 \leq X \leq Y \leq 1000000)$.

Output

For each test case, output the number of possible triangles whose side lengths are between X and Y inclusive.

Sample Input

Sample Input	Output for Sample Input
5 1 10 5 10 5 15 10 20 100 400	125 55 252 285 3898600

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