6862   Triples

Mr. A invites you to solve the following problem:

> "Let be m and n two positive integers, $5 \le m \le 100$, $2 \le n \le 100$. Consider the following sets of triples:
>
> $$T_{m.j} = \{(x, y, z) \in \mathbb{N}^3 \mid x \le y \le z \le m \text{ and } x^j + y^j = z^j\}, \quad j = 2..n$$
>
> where $\mathbb{N}$ is the set of nonnegative integers ($\mathbb{N} = \{0, 1, 2, \ldots\}$)."

The problem asks you to compute the sum $S_{m,n}$:

$$S_{m,n} = \sum_{j=2}^{n} card(T_{m,j})$$

where $card(T_{m,j})$ is the number of elements of the set $T_{m.j}$.

Input

The input file contains several test cases, each of them as described below.

The first line contains the value of m and the second line contains the value of n.

Output

For each test case, the result will be written to standard output, on a line by itself..

Sample Input

```
85
95
```

Sample Output

```
8128
```