

Problem G. One Root

Input file: *standard input*
Output file: *standard output*
Time limit: 2 seconds
Memory limit: 512 mebibytes

For a fixed n and integers p and q such that $|p| \leq m$ and $|q| \leq m$, how many equations of the form

$$x^n + px + q = 0$$

have exactly one real root?

Input

The only line of input contains two integers n and m ($1 \leq n, m \leq 10^6$, $n \geq 2$).

Output

Print a single integer: the number of equations having exactly one real root.

Examples

standard input	standard output
2 4	5
3 5	96