Problem E. Takahashikun, The Strider

Time limit 2000 ms
Mem limit 1048576 kB

Problem Statement

Takahashi is standing on a two-dimensional plane, facing north. Find the minimum positive integer K such that Takahashi will be at the starting position again after he does the following action K times:

- Go one meter in the direction he is facing. Then, turn X degrees counter-clockwise.

Constraints

- $1 \leq X \leq 179$
- X is an integer.

Input

Input is given from Standard Input in the following format:

```
X
```

Output

Print the number of times Takahashi will do the action before he is at the starting position again.

Sample 1

Input	Output
90	4

Takahashi's path is a square.

Sample 2

Input	Output
1	360