F. Four Divisors

If an integer a is divisible by another integer b, then b is called the divisor of a.

For example: 12 has positive 6 divisors. They are 1, 2, 3, 4, 6 and 12.

Let's define a function $D(n)$ — number of integers between 1 and n (inclusive) which has exactly four positive divisors.

Between 1 and 10 only the integers 6, 8 and 10 has exactly four positive divisors. So, $D(10) = 3$.

You are given an integer n. You have to calculate $D(n)$.

Input

The only line contains integer n $(1 \leq n \leq 10^{11})$ — the parameter from the problem statement.

Output

Print the only integer c — the number of integers between 1 and n with exactly four divisors.

Examples

input
```
10
```
output
```
3
```

input
```
20
```
output
```
5
```