1201. Ugly Number III

Description

An **ugly number** is a positive integer that is divisible by a, b, or c.

Given four integers n, a, b, and c, return the nth **ugly number**.

Example 1:

```
Input: n = 3, a = 2, b = 3, c = 5
Output: 4
Explanation: The ugly numbers are 2, 3, 4, 5, 6, 8, 9, 10... The 3rd is 4.
```

Example 2:

```
Input: n = 4, a = 2, b = 3, c = 4
Output: 6
Explanation: The ugly numbers are 2, 3, 4, 6, 8, 9, 10, 12... The 4th is 6.
```

Example 3:

```
Input: n = 5, a = 2, b = 11, c = 13
Output: 10
Explanation: The ugly numbers are 2, 4, 6, 8, 10, 11, 12, 13... The 5th is 10.
```

Constraints:

- $1 <= n, a, b, c <= 10^9$
- $1 <= a * b * c <= 10^{18}$
- It is guaranteed that the result will be in range $[1, 2 * 10^9]$.