

# 1676. Minimum Number of Days to Eat N Oranges

## Difficulty : Hard

<https://leetcode.com/problems/minimum-number-of-days-to-eat-n-oranges>

There are  $n$  oranges in the kitchen and you decided to eat some of these oranges every day as follows:

- Eat one orange.
- If the number of remaining oranges  $n$  is divisible by 2 then you can eat  $n / 2$  oranges.
- If the number of remaining oranges  $n$  is divisible by 3 then you can eat  $2 * (n / 3)$  oranges.

You can only choose one of the actions per day.

Given the integer  $n$ , return *the minimum number of days to eat  $n$  oranges*.

### Example 1:

**Input:**  $n = 10$

**Output:** 4

**Explanation:** You have 10 oranges.

Day 1: Eat 1 orange,  $10 - 1 = 9$ .

Day 2: Eat 6 oranges,  $9 - 2 * (9/3) = 9 - 6 = 3$ . (Since 9 is divisible by 3)

Day 3: Eat 2 oranges,  $3 - 2 * (3/3) = 3 - 2 = 1$ .

Day 4: Eat the last orange  $1 - 1 = 0$ .

You need at least 4 days to eat the 10 oranges.

### Example 2:

**Input:**  $n = 6$

**Output:** 3

**Explanation:** You have 6 oranges.

Day 1: Eat 3 oranges,  $6 - 6/2 = 6 - 3 = 3$ . (Since 6 is divisible by 2).

Day 2: Eat 2 oranges,  $3 - 2 * (3/3) = 3 - 2 = 1$ . (Since 3 is divisible by 3)

Day 3: Eat the last orange  $1 - 1 = 0$ .

You need at least 3 days to eat the 6 oranges.

### Constraints:

- $1 \leq n \leq 2 * 10^9$