You are given an integer array gifts denoting the number of gifts in various piles. Every second, you do the following:

* Choose the pile with the maximum number of gifts.
* If there is more than one pile with the maximum number of gifts, choose any.
* Leave behind the floor of the square root of the number of gifts in the pile. Take the rest of the gifts.

Return *the number of gifts remaining after* k *seconds.*

**Example 1:**

Input: gifts = [25,64,9,4,100], k = 4  
Output: 29  
Explanation:   
The gifts are taken in the following way:  
- In the first second, the last pile is chosen and 10 gifts are left behind.  
- Then the second pile is chosen and 8 gifts are left behind.  
- After that the first pile is chosen and 5 gifts are left behind.  
- Finally, the last pile is chosen again and 3 gifts are left behind.  
The final remaining gifts are [5,8,9,4,3], so the total number of gifts remaining is 29.

**Example 2:**

Input: gifts = [1,1,1,1], k = 4  
Output: 4  
Explanation:   
In this case, regardless which pile you choose, you have to leave behind 1 gift in each pile.   
That is, you can't take any pile with you.   
So, the total gifts remaining are 4.

**Constraints:**

* 1 <= gifts.length <= 103
* 1 <= gifts[i] <= 109
* 1 <= k <= 103