# 1228. Missing Number In Arithmetic Progression

## Description

In some array arr, the values were in arithmetic progression: the values arr[i + 1] - arr[i] are all equal for every 0 <= i < arr.length - 1.

A value from arr was removed that was not the first or last value in the array.

Given arr, return the removed value.

### Example 1:

```
Input: arr = [5,7,11,13]
Output: 9
Explanation: The previous array was [5,7,9,11,13].
```

#### Example 2:

```
Input: arr = [15,13,12]
Output: 14
Explanation: The previous array was [15, 14,13,12].
```

#### **Constraints:**

- 3 <= arr.length <= 1000
- 0 <= arr[i] <= 10 <sup>5</sup>
- The given array is **guaranteed** to be a valid array.