11881 Internal Rate of Return

In finance, Internal Rate of Return (IRR) is the discount rate of an investment when NPV equals zero. Formally, given T, CF_0, CF_1, ..., CF_T, then IRR is the solution to the following equation:

$$NPV = CF_0 + \frac{CF_1}{1+IRR} + \frac{CF_2}{(1+IRR)^2} + K + \frac{CF_T}{(1+IRR)^T} = 0$$

Your task is to find all valid IRRs. In this problem, the initial cash-flow $CF_0 < 0$, while other cash-flows are all positive ($CF_i > 0$ for all $i = 1, 2, \ldots$).

Important: IRR can be negative, but it must be satisfied that $IRR > -1$.

Input

There will be at most 25 test cases. Each test case contains two lines. The first line contains a single integer T ($1 \leq T \leq 10$), the number of positive cash-flows. The second line contains $T + 1$ integers: CF_0, CF_1, CF_2, ..., CF_T, where $CF_0 < 0$, $0 < CF_i < 10000$ ($i = 1, 2, \ldots, T$). The input terminates by $T = 0$.

Output

For each test case, print a single line, containing the value of IRR, rounded to two decimal points. If no IRR exists, print "`No`" (without quotes); if there are multiple IRRs, print "`Too many`"(without quotes).

Sample Input

```
1
-1 2
2
-8 6 9
0
```

Sample Output

```
1.00
0.50
```

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