Problem D. ABCDEF

Time limit	1000 ms
Mem limit	1572864 kB
Code length Limit	50000 B
OS	Linux

You are given a set S of integers between -30000 and 30000 (inclusive).

Find the total number of sextuples $(a,b,c,d,e,f): a,b,c,d,e,f \in S; d \neq 0$ that satisfy:

$$\frac{a*b+c}{d} - e = f$$

Input

The first line contains integer N ($1 \le N \le 100$), the size of a set S.

Elements of S are given in the next N lines, one integer per line. Given numbers will be distinct.

Output

Output the total number of plausible sextuples.

Examples

Input	Output
1 1	1

Input	Output
2 2 3	4

Input	Output
2 -1 1	24

Input	Output
3 5 7 10	10