Problem 2 – Pythagorean Numbers

George likes math. Recently he discovered an interesting property of the Pythagorean Theorem: there are infinite number of triples of integers **a**, **b** and **c** (a ≤ b), such that $\mathbf{a^2 + b^2 = c^2}$. Write a program to help George find all such triples (called Pythagorean numbers) among a set of integer numbers.

Input

The input data should be read from the console. At the first line, we have a number **n** – the count of the input numbers. At the next **n** lines we have **n different integers**.

The input data will always be valid and in the format described. There is no need to check it explicitly.

Output

Print at the console all Pythagorean equations $\mathbf{a^2 + b^2 = c^2}$ (a ≤ b), which can be formed by the input numbers. Each equation should be printed in the following format: "**a*a + b*b = c*c**". The order of the equations is not important. Beware of **spaces**: put spaces around the "**+**" and "**=**". In case of no Pythagorean numbers found, print "**No**".

Constraints

- All input numbers will be **unique** integers in the range [0…999].
- The **count** of the input numbers will be in the range [1..100].
- Time limit: 0.3 sec. Memory limit: 16 MB.

Examples

Input	Output
8 41 5 9 12 4 13 40 3	5*5 + 12*12 = 13*13 9*9 + 40*40 = 41*41 3*3 + 4*4 = 5*5

Input	Output
5 3 12 5 0 4	3*3 + 4*4 = 5*5 0*0 + 3*3 = 3*3 0*0 + 12*12 = 12*12 0*0 + 5*5 = 5*5 0*0 + 0*0 = 0*0 0*0 + 4*4 = 4*4

Input	Output
3 10 20 30	No