A Lot of Stones in a Row

Description

What is the purpose of stonghenge? Shik is crazy.

But recently, Shik realizes a tiny hint after he plays Civilization 5 (A cool computer game). If a Stonehenge with n stones forms a regular n-sided polygon, then building the Stonehenge will increases the residents' faith by 5. Otherwise, the Stonehenge is just a stupid giant birthday cake. Note that the order of stones to form the polygon is given and CANNOT be changed.

Shik has collected lots of data of different stonehenges. Please help him to check the functionality of each stonehenge.

Formally, a regular polygon is a convex polygon whose angles are all equal and all its sides have the same length. The area of a regular polygon must be nonzero.

Input

The first line contains a integer T indicating the total number of test cases. Each test case begins with an integer n, denoting the number of stones in the stonehenge. Following n lines, each contains 2 integers x_i, y_i, describe the coordinates of n stones in order. Two stones may lay in same places.

- $1 \le T \le 200$
- $3 \le n \le 100$
- $|x_i|, |y_i| \le 10,000$

Output

For each test case, if the given stonghenge form a regular n-sided polygon, please output "+5 Faith" in a line; Otherwise, output "No use".

Sample Input

```
5

4
1 0
0 1
1 2
2 1

4
1 0
1 2
0 1
2 1

4
0 0
2 0
2 1
0 1

3
1 1
3 3
3 1

4
0 0
0 0
0 0
0 0
```

Sample Output

```
+5 Faith
No use
No use
No use
No use
```