



Problem E Elimination Game

Time limit: 2 seconds

Memory limit: 1024 megabytes

Problem Description

Ian is playing the Elimination Game. In this game, there are n pebbles, i-th of which is of weight i. Ian has access to two machines: a minimizer and a maximizer. When two pebbles are given to the minimizer, it returns the lighter pebble. Conversely, when two pebbles are given to the maximizer, it returns the heavier one.

The game consists of n-1 rounds. In each round, Ian has to select two pebbles and send them to either the minimizer or the maximizer. After the machine returns one of the pebbles, he takes the pebble and proceeds to the next round. Due to wear and tear, he can only use the minimizer at most a times and the maximizer at most b times throughout the game.

It is apparent that no matter how Ian operates the machines in each round, after all n-1 rounds, only one pebble will remain. Ian's favorite number is x, so he wants the pebble with weight x to be the remaining one. Can Ian reach his goal if he operates the machines in each round wisely?

Input Format

The first line of the input contains an integer t, denoting the number of testcases. The description of the test cases follows.

The only line of each test case contains four integers n, a, b, x, denoting the number of pebbles, the usage limit of the minimizer, the usage limit of the maximizer, and Ian's favorite number, respectively.

Output Format

For each test case, if it is possible for Ian to reach his goal, print 'Yes'. Otherwise, print 'No'.

Technical Specification

- $1 \le t \le 50000$
- $1 \le n \le 1000$
- 0 < a, b < n 1
- a + b = n 1
- $1 \le x \le n$

Sample Input 1

Sample Output 1

2	Yes
5 2 2 4	No
10 0 9 7	