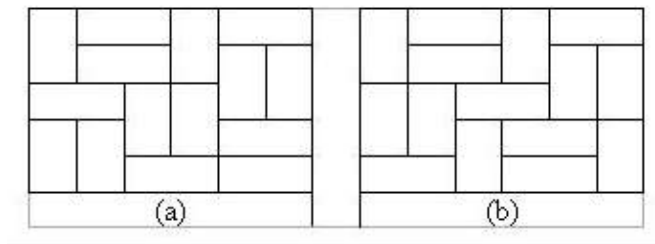




## 2892 - Unbreakable Floor

Asia - Dhaka - 2003/2004

Alan bought a new house. He likes rectangles, so he wants his floor full of identical rectangular shapes. Imagine he has a floor of  $5 \times 6$ , he may fill this floor with rectangles of  $1 \times 2$  in at least two ways:



**Picture (a) shows a 'breakable' layout**, since there is a straight line through the whole floor which divides the floor into two parts -- a  $5 \times 4$  rectangle and a  $5 \times 2$  rectangle, and all the  $1 \times 2$  rectangles are not destroyed.

**Picture (b) shows a 'unbreakable' layout**, since you cannot divide it into two parts without destroying any  $1 \times 2$  rectangle.

Alan likes unbreakable floorings, but he's not sure if it is possible for any size of floor and rectangle shape. Can you tell him?

### Input

The first line contains the number of tests  $t$  ( $1 \leq t \leq 40$ ). Each case consists of a single line with four positive integers  $p, q, a, b$  ( $1 \leq p, q, a, b \leq 10000$ ).

### Output

For each test case, print the case number first. Then print the word 'Yes' if it is possible to make a unbreakable floor of  $a \times b$  with rectangles of  $p \times q$ , otherwise print the word 'No'. Answer for each case should be in exactly one line.

### Sample Input

```
3
1 2 5 6
1 2 3 17
2 3 11 18
```

### Sample Output

```
Case 1:Yes
Case 2:No
Case 3:Yes
```