Mock CCC '19 Contest 1 J3 - Pusheen Eats Tuna Sashimi and Tuna Nigiri

Time limit: 1.0s **Memory limit:** 1G

Pusheen has been dreaming about tuna sashimi! She has decided that she needs to eat more tuna in her life, so she decides to visit T restaurants to eat tuna sashimi and tuna nigiri.

Each restaurant that Pusheen wishes to visit sells sashimi and nigiri at their own prices - restaurant i sets their prices at A_i dollars per piece of tuna sashimi and B_i dollars per piece of tuna nigiri. Pusheen has decided that before tax and tip, the amount of money she spends should be exactly N_i dollars for restaurant i. Is it possible for Pusheen to spend exactly N_i dollars on sashimi and nigiri? (Don't worry, she's budgeted money for the tip!)

Constraints

$1 \leq T \leq 2500$

$1 \leq A_i \leq B_i \leq 50$

$1 \leq N_i \leq 50$

In tests worth 3 marks, $A_i = 1$.

In tests worth an additional 3 marks, B_i will be divisible by A_i.

Input Specification

The first line contains a single positive integer T, the number of times Pusheen repeats this exercise.

Each of the next T lines contains three positive space-separated integers, A_i, B_i, and N_i, indicating that her favourite sushi restaurant is charging A_i dollars per piece for sashimi and B_i dollars per piece for nigiri, and Pusheen's budget purely for the sashimi and nigiri is N_i dollars.

Output Specification

Output T lines. If Pusheen can order items accordingly from the ith restaurant, output `YES` on the ith line. Otherwise, output `NO`.

Sample Input

```
2
2 2 2
3 4 5
```

Sample Output

```
YES
NO
```

Sample Explanation

In the first example, Pusheen can order either one piece of sashimi or one piece of nigiri.

In the second example, Pusheen is unable to order exactly 5 dollars of items from sashimi or nigiri. One piece of nigiri costs four dollars, but two pieces of sashimi cost six dollars.