

Easy Jug

One day Manku was very thirsty so he decided to drink exactly z litres of water. However, in front of him, there is a well of infinite amount of water and 2 empty jugs of quantity x litres and y litres respectively.

Now Manku can do the following operations to any jug

1. Fill it completely from the well
2. Empty it entirely
3. Transfer as much water from Jug 1 to Jug 2, till Jug 1 gets empty or Jug 2 is completely filled.

Now since he has no measuring device so he will do these operations only to make any of the 2 jug having exactly z litres of water.

Now Your task is given value of x , y , z , tell whether it is possible for Manku to drink water or not.

Input

First Line of Input contains T , the number of test cases. ($T \leq 25$)

Then for each test case there are 3 numbers x , y , z given in separate line.

- $1 \leq x \leq 10^8$
- $1 \leq y \leq 10^8$
- $1 \leq z \leq 10^8$

Output

For each test case output "YES" if manku can drink exactly z litres of water else "NO".

Example

Input:

```
5
2 4 3
2 5 1
9 3 6
3 8 7
6 1 10
```

Output:

```
NO
YES
YES
YES
NO
```

Explanation

- In Test case 1 Either Manku can have 2 or 4 litres of water so he cant drink 3 litres.

- In Test case 2 Manku can have 1 litre water by doing the following operations:
 - Fill 2 litre Jug
 - Transfer its water to 5 litre Jug
 - Again Fill 2 litre Jug
 - Again Transfer its entire water to 5 litre Jug
 - Now 5 litre Jug will have total 4 litre water
 - Again Fill 2 litre Jug
 - Now transfer 1 litre water to 5 litre Jug
 - because at present 5 litre Jug don't have space for more than 1 litre water
 - Now the 2 litre Jug will have only 1 litre water left
- For Test case 3 we will transfer 3 litre water twice from 3 litre jug to 9 litre jug
- For test Case 4,
 - transfer 3 times water of 3 litre jug to 8 litre jug
 - Ultimately 3 litre Jug has 1 litre water left and 8 litre Jug is full
 - Now empty 8 litre jug and pour remaining 1 litre of 3 litre jug in it
 - Now fill 3 litre jug fully twice and transfer its water to 8 litre jug
 - Now 8 litre Jug will have 7 litre water
- For Test case 5, we cant have 10 litre of water in any jug