Problem AN. Dungeon

Time limit   2000 ms

Mem limit   262144 kB

You are playing a new computer game in which you have to fight monsters. In a dungeon you are trying to clear, you met three monsters; the first of them has a health points, the second has b health points, and the third has c.

To kill the monsters, you can use a cannon that, when fired, deals 1 damage to the selected monster. Every 7-th (i. e. shots with numbers 7, 14, 21 etc.) cannon shot is *enhanced* and deals 1 damage to **all** monsters, not just one of them. If some monster's current amount of health points is 0, it can't be targeted by a regular shot and does not receive damage from an *enhanced* shot.

You want to pass the dungeon beautifully, i. e., kill all the monsters with the same *enhanced* shot (i. e. after some *enhanced* shot, the health points of each of the monsters should become equal to 0 **for the first time**). Each shot must hit a monster, i. e. each shot deals damage to at least one monster.

Input

The first line contains a single integer t ($1 \le t \le 10^4$) — the number of test cases.

Each test case consists of a single line that contains three integers a, b and c ($1 \le a, b, c \le 10^8$) — the number of health points each monster has.

Output

For each test case, print `YES` if you can kill all the monsters with the same *enhanced* shot. Otherwise, print `NO`. You may print each letter in any case (for example, `YES`, `Yes`, `yes`, `yEs` will all be recognized as positive answer).

Examples

Input	Output
3 3 2 4 1 1 1 10 1 7	YES NO NO

Note

In the first test case, you can do as follows: 1-th shot to the first monster, 2-th shot to the second monster, 3-th shot to the third monster, 4-th shot to the first monster, 5-th shot to the third monster, 6-th shot to the third monster, and 7-th *enhanced* shot will kill all the monsters.

In the second test case, you can't kill monsters with the same *enhanced* shot, because the total number of health points of monsters is 3, and you will kill them in the first 3 shots.