Numbers and operations

We have a sequence of 5 numbers (a, b, c, d, e) and we have to decide if it is possible to combine them in such a way that we can obtain a given result K. The order of the sequence of numbers cannot be changed.

The operations we can use are addition, subtraction, multiplication and division. We can only use division if the divisor is not 0 and the remainder of the division is 0. All the operations have the same precedence and are carried out from left to right, so the evaluation of the expression is as follows:

$$(((a\ op_1\ b)\ op_2\ c)\ op_3\ d)\ op_4\ e = K$$

For example, with the numbers $(7, 1, 3, 8, 8)$ we can obtain number 2, since $2 = (7-1)/3+8-8$, but we cannot obtain 66, even though $66 = (7-1)/3+8*8$ because in this case we are considering that multiplication precedes addition. We cannot obtain 89, either, even though $89 = (7+3)*8+8+1$, because we are changing the order of the sequence of numbers.

Input

The input has several test cases. Each test case consists of two lines: the first one contains the value of K (the number we want to obtain), and the second contains the sequence of 5 numbers we need to use in order to obtain K. The value of these five numbers ranges between -50 and 50.

Output

For each test case, the output must be YES if it is possible to ontain K and NO otherwise.

Sample input

```
2
7 1 3 8 8
66
7 1 3 8 8
82
7 1 3 8 8
82
1 8 8 7 3
```

Sample output

```
YES
NO
NO
YES
```

Notes

This exercise has been designed by Marco Antonio Gómez Martín. It must be understood in the context of the *Data Structures and Algorithms* course, FDI-UCM 2016/2017 (prof. Gonzalo Méndez). Therefore, the only valid solutions are those that use the concepts studied in this course. Additional remarks may be provided in class.