6428 A+B

There is a computer, which has two memory cells (let us denote these cells by the letters a and b). Each cell (variable) stores some integer at any time. The computer can execute only two instructions a+=b and b+=a. The first instruction increases the value of the variable a by the value stored in the variable a. The second one, respectively, increases the value of a by the value a. A program for this computer consists of a sequence (possible empty) of such instructions. The instructions are executed in the appropriate order. Your task is to determine whether the given value a0 can be obtained in some cell after executing some program.

Input

The input file contains several test cases, each of them as described below.

The input contains three integers: the initial value of the variable a, the initial value of the variable b and the required value S ($0 \le a, b, S \le 10^{18}$).

Sample Output

For each test case, write to the output 'YES' if the required value can be obtained as a result of some program execution, or 'NO' otherwise on a line by itself.

Sample Input

1 2 3

3 4 5

3 4 17

Sample Output

YES

NO

YES