DIOPHANTINE

Given a,b,c (where a,b not both zero) your task is to find if there exist any integers x,y that satisify the equation a*x+b*y=c.

Input

The input consists of several test cases. Each test case contains a line with the three integers a,b,c (a,b,c <= 10000000). The test case 0 0 0 indicates the end of input.

Output

For each test case you must output "YES" if there exists a solution,otherwise output "NO". (quotes only for clarity)

Example

Input:
1 9 1
5 10 19
0 0 0

Output:
YES
NO