

Kangaroo

You are choreographing a circus show with various animals. For one act, you are given two kangaroos on a number line ready to jump in the positive direction (i.e, toward positive infinity).

- The first kangaroo starts at location x_1 and moves at a rate of v_1 meters per jump.
- The second kangaroo starts at location x_2 and moves at a rate of v_2 meters per jump.

You have to figure out a way to get both kangaroos at the same location as part of the show.

Complete the function `kangaroo` which takes starting location and speed of both kangaroos as input, and return **Yes** or **No** appropriately. Can you determine if the kangaroos will ever land *at the same location at the same time*? The two kangaroos must land at the same location after making the same number of jumps.

Input Format

A single line of four space-separated integers denoting the respective values of x_1 , v_1 , x_2 , and v_2 .

Constraints

- $0 \leq x_1 < x_2 \leq 10000$
- $1 \leq v_1 \leq 10000$
- $1 \leq v_2 \leq 10000$

Output Format

Print **YES** if they can land on the same location at the same time; otherwise, print **NO**.

Note: The two kangaroos must land at the same location *after making the same number of jumps*.

Sample Input 0

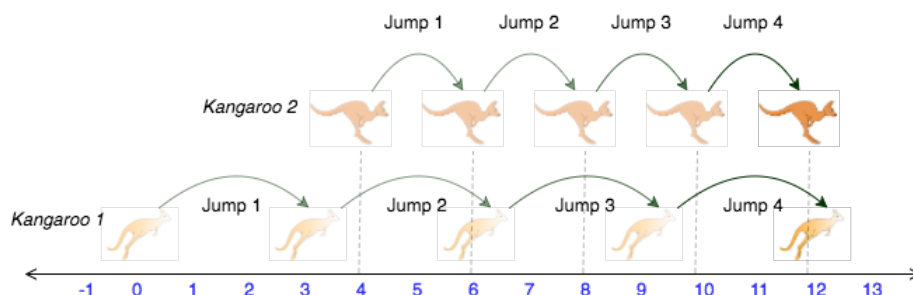
```
0 3 4 2
```

Sample Output 0

```
YES
```

Explanation 0

The two kangaroos jump through the following sequence of locations:



From the image, it is clear that the kangaroos meet at the same location (number **12** on the number line) after same number of jumps (**4** jumps), and we print **YES**.

Sample Input 1

0 2 5 3

Sample Output 1

NO

Explanation 1

The second kangaroo has a starting location that is ahead (further to the right) of the first kangaroo's starting location (i.e., $x_2 > x_1$). Because the second kangaroo moves at a faster rate (meaning $v_2 > v_1$) *and* is already ahead of the first kangaroo, the first kangaroo will never be able to catch up. Thus, we print *NO*.