

## 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 must figure out a way to get both kangaroos at the same location as part of the show. Complete the problem 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

- $0 \leq X_1 < X_2 \leq 10000$
- $1 \leq V_1, V_2 \leq 10000$

### Output Format

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

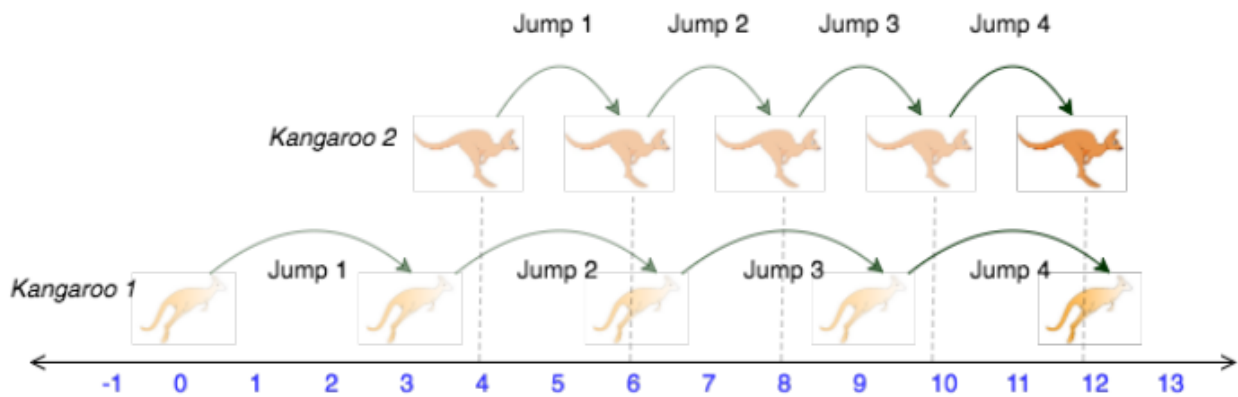
**Note:** The two kangaroos must land at the same location after making the same number of jumps.

### Sample Input

Sample input	Sample output
0 3 4 2	YES

## Explanation

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

Sample input	Sample output
0 2 5 3	NO

## Explanation

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**.