

Problem A: Multiples

Two points (x_1, y_1) and (x_2, y_2) are said to be integer multiples if there is an integer N such that $(x_1, y_1) = (Nx_2, Ny_2)$ or $(Nx_1, Ny_1) = (x_2, y_2)$.

For example,

$(1, 2)$ and $(2, 4)$ are integer multiples, since for $N = 2$, $(2*1, 2*2) = (2, 4)$

$(1, 2)$ and $(-3, -6)$ are also integer multiples ($N = -3$)

$(1, 2)$ and $(1, 3)$ are not integer multiples, since there is no N such that $(N*1, N*2) = (1, 3)$ and vice versa.

Given two points, figure out if they are integer multiples of each other.

Input:

The first line of input provides the number of test cases, T ($1 \leq T \leq 100$). T test cases follow. Each test case consists of two lines. Each line contains two integers x, y , which represent a point (x, y) .

Output:

For each test case, your program should output one line containing "YES" if the two points are integer multiples, or "NO" otherwise.

Sample Input:

```
4
1 2
-4 -8
3 7
9 21
26 2
13 1
0 7
1 7
```

Sample Output:

```
YES
YES
YES
NO
```

Explanation for Sample Input:

Looking at the first three test cases in order, we note that:

$$(-4*1, -4*2) = (-4, -8)$$

$$(3*3, 3*7) = (9, 21)$$

$$(26, 2) = (2*13, 2*1)$$