B. Good Start

time limit per test: 1 second
memory limit per test: 256 megabytes

The roof is a rectangle of size $w \times h$ with the bottom left corner at the point $(0, 0)$ on the plane. Your team needs to completely cover this roof with identical roofing sheets of size $a \times b$, with the following conditions:

- The sheets cannot be rotated (not even by 90°).
- The sheets must not overlap (but they can touch at the edges).
- The sheets can extend beyond the boundaries of the rectangular roof.

A novice from your team has already placed two such sheets on the roof in such a way that the sheets **do not overlap** and each of them **partially covers the roof**.

Your task is to determine whether it is possible to completely tile the roof without removing either of the two already placed sheets.

Input

Each test contains multiple test cases. The first line contains the number of test cases t ($1 \le t \le 10^4$). The description of the test cases follows.

The first line of each test case contains four integers w, h, a, and b ($1 \le w, h, a, b \le 10^9$) — the dimensions of the roof and the dimensions of the roofing sheets, respectively.

The second line of each test case contains four integers x_1, y_1, x_2, and y_2 ($-a + 1 \le x_1, x_2 \le w - 1, -b + 1 \le y_1, y_2 \le h - 1$) — the coordinates of the bottom left corners of the already placed roofing sheets. It is guaranteed that these sheets do not overlap.

Output

For each test case, output "Yes" (without quotes) if it is possible to completely tile the roof without removing either of the two already placed tiles, and "No" (without quotes) otherwise.

You can output the answer in any case (upper or lower). For example, the strings "yEs", "yes", "Yes", and "YES" will be recognized as positive responses.

Example

input Copy

```
7
6 5 2 3
-1 -2 5 4
4 4 2 2
0 0 3 1
10 9 3 2
0 0 4 3
10 9 3 2
0 0 6 3
5 5 2 2
-1 -1 4 -1
5 5 2 2
-1 -1 2 3
7 8 2 4
0 0 0 5
```

output Copy

```
Yes
No
No
Yes
```

Codeforces Round 1031 (Div. 2)

Contest is running

01:50:14

Contestant

→ **Submit?**

Language: GNU G++23 14.2 (64 bit, ms

Choose file: Choose File No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

Submit

→ **Last submissions**

Submission	Time	Verdict
324462343	Jun/15/2025 12:14	Pretests passed

→ **Score table**

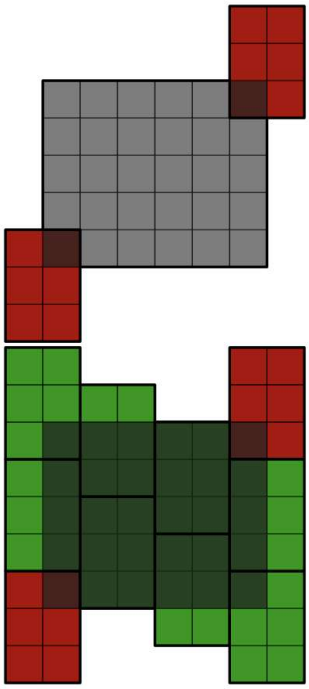
	Score
Problem A	482
Problem B	723
Problem C	1205
Problem D	1687
Problem E	2410
Problem F	2892
Successful hack	100
Unsuccessful hack	-50
Unsuccessful submission	-50
Resubmission	-50

* If you solve problem on 00:09 from the first attempt

```
No
Yes
No
```

Note

In the first test case, it is possible to add 8 roofing sheets as follows:



In the second test case, it is impossible to completely tile the roof: