Problem N
New Scanning Device

Time limit: 1 second
Memory limit: 1024 megabytes

Problem Description

As part of your contribution in the Great Bubble War, you have been tasked with finding the newly built enemy fortress. The world you live in is a giant $10^9 \times 10^9$ grid, with rows are numbered 1 to 10^9 from top to bottom, and columns are numbered 1 to 10^9 from left to right. The square at the i-th row and j-th column is called square (i, j).

You know that the enemy base has the shape of a rectangle, with the sides parallel to the sides of the grid. To help you locate the base, you have been given a new device that you can scan any rectangles of the grid, and it will tell you the common area of the scan area and the base.

Unfortunately, the device is powered by a battery and you can't recharge it. This means that you can use the device at most 66 times.

Technical Specification

Your code is allowed to scan any rectangles in the grid with the top-left corner square at (x_1, y_1) and the bottom-right corner square at (x_2, y_2) by writing "`? x1 y1 x2 y2`" ($1 \le x_1 \le x_2 \le 10^9, 1 \le y_1 \le y_2 \le 10^9$). In return, you will recieve the common area of the rectangle and the enemy base or -1 if your query is invalid.

If you receive -1 , exit immidiately and you will see the wrong answer verdict. Otherwise, you can get an arbitrary verdict because your solution will continue to read from a closed stream. Your solution should use no more than 66 queries.

Once you are sure where the enemy base is located, you should print "`! x y p q`" ($1 \le x \le p \le 10^9$,$1 \le y \le q \le 10^9$), where (x, y) is the square at the top-left corner, and (p, q) is the square at the bottom-right corner.

Sample

standard input	standard output
	? 1 1 5 5
4	
	? 2 2 4 4
4	
	? 2 2 4 2
0	
	? 2 2 2 4
0	
	! 3 3 4 4