Problem 4. Use the Force, Lu

Steven is training to become a jedi while riding on the ship the Mellon-ian Tartan. He is currently using a training remote, which sends low-power lasers in different directions, which Steven must then deflect with his lightsaber. However, the force is not strong with this one, and Steven is not doing very well. Thus, he decides to use his programmable robotic arm to help him out. He needs you to write a program for his arm that will help him decide the direction to move his lightsaber.

Input

The input consists of a number n, with $1 \leq n \leq 1000$, followed by n lines. Each line will contain six integers whose absolute value is at most 1000, in the order x_1, y_1, x_2, y_2, x_3, y_3. The first four numbers represent the lightsaber, a line with equation $(y - y_1) * (x_2 - x_1) = (x - x_1) * (y_2 - y_1)$. (For the purposes of this problem, the lightsaber is an infinite line in both directions.) The last two numbers represent the point (x_3, y_3) where the next laser will be. (x_1, y_1) and (x_2, y_2) will never be the same point. Study the sample input and output carefully to make sure you understand the problem.

Output

Write n lines. On each line, write "Right" if (x_3, y_3) is to the right of the line, "Left" if (x_3, y_3) is to the left of the line, or "Stay" if (x_3, y_3) is on the line.

Example

standard input	standard output
5 0 1 1 3 2 5 0 1 1 3 -1 -1 0 0 1 1 5 0 1 1 0 0 5 0 0 0 0 1 3 4	Stay Stay Right Left Right

Note

Lines with the same equation can be "facing different directions" if the order of the points is different. For example, the point (1,1) is on the right side of the line with $(x_1, y_1) = (0, 0)$ and $(x_2, y_2) = (0, 1)$ but on the left side of the line with $(x_1, y_1) = (0, 1)$ and $(x_2, y_2) = (0, 0)$