1306 – Solutions to an Equation

You have to find the number of solutions of the following equation:

$$Ax + By + C = 0$$

Where **A, B, C, x, y** are integers and $x_1 \leq x \leq x_2$ and $y_1 \leq y \leq y_2$.

Input

Input starts with an integer **T ($\leq$ 10000)**, denoting the number of test cases.

Each case starts with a line containing seven integers **A, B, C, x_1, x_2, y_1, y_2 ($x_1 \leq x_2$, $y_1 \leq y_2$)**. The value of each integer will lie in the range **[-10^8, 10^8]**.

Output

For each case, print the case number and the total number of solutions.

Sample Input	Output for Sample Input
5 1 1 -5 -5 10 2 4 -10 -8 80 -100 100 -90 90 2 3 -4 1 7 0 8 -2 -3 6 -2 5 -10 5 1 8 -32 0 0 1 10	Case 1: 3 Case 2: 37 Case 3: 1 Case 4: 2 Case 5: 1