

# GO POKEMON GO!

Pokemon GO! has gotten viral and people of all ages have started playing it. G33K a chemistry professor have also started playing the game, he got his first pokemon "charmander" but he is a bit confused of his pokemon's combat power, in professor's mobile the combat power is represented by 4 distinct integers separated by space  $i_1, j_1, i_2, j_2$  and a formula is being given which calculates the final combat power of pokemon!

The formula goes like this -

Since G33k is a chemistry professor he is weak in programming , your task is to calculate the combat power for the professor!

## Input

The problem will consist of  $t$  test cases, each containing four numbers

$t \leq 100$

4 integers separated by space  $i_1, j_1, i_2, j_2$

$1 \leq i_1, j_1, i_2, j_2 \leq 100000$

$i_1 < j_1, i_2 < j_2$

## Output

print the combat power of pokemon in a new line!

## Example

**Input:**

1  
2 3 4 5

**Output:**

16

**EDIT: Time limit is changed**