

1. PARKING

Having dropped out of school because of chemistry, Luka got a job driving trucks. One evening he parked his three trucks in a rest area which charges for parking in an unusual way – they give a discount on quantity.

When only one truck is parked, the driver pays A kuna per minute. When two trucks are parked, the drivers each pay B kuna per minute. When three trucks are parked, the drivers each pay C kuna per minute.

Given the numbers A, B and C, as well as the intervals in which Luka's three trucks are parked, determines how much Luka needs to pay the owner of the rest area.

Input

The first line contains three integers A, B and C ($1 \leq C \leq B \leq A \leq 100$), the prices of parking as defined above.

Each of the following three lines contains two integers each. These are the arrival and departure times (in minutes) of one of Luka's trucks. The arrival time will always be earlier than the departure time. All time indexes will be between 1 and 100.

Output

Output the overall cost of Luka's parking his three trucks.

Sample test data

input	input
5 3 1	10 8 6
1 6	15 30
3 5	25 50
2 8	70 80
output	output
33	480