

Taum is planning to celebrate the birthday of his friend, Diksha. There are two types of gifts that Diksha wants from Taum: one is black and the other is white. To make her happy, Taum has to buy  $b$  black gifts and  $w$  white gifts.

- The cost of each black gift is  $bc$  units.
- The cost of every white gift is  $wc$  units.
- The cost to convert a black gift into white gift or vice versa is  $z$  units.

Determine the minimum cost of Diksha's gifts.

**Example**

$b = 3$   
 $w = 5$   
 $bc = 3$   
 $wc = 4$   
 $z = 1$

He can buy a black gift for  $3$  and convert it to a white gift for  $1$ , making the total cost of each white gift  $4$ . That matches the cost of a white gift, so he can do that or just buy black gifts and white gifts. Either way, the overall cost is  $3 * 3 + 5 * 4 = 29$ .

**Function Description**

Complete the function *taumBday* in the editor below. It should return the minimal cost of obtaining the desired gifts.

taumBday has the following parameter(s):

- *int b*: the number of black gifts
- *int w*: the number of white gifts
- *int bc*: the cost of a black gift
- *int wc*: the cost of a white gift
- *int z*: the cost to convert one color gift to the other color

**Returns**

- *int*: the minimum cost to purchase the gifts

**Input Format**

The first line will contain an integer  $t$ , the number of test cases.

The next  $t$  pairs of lines are as follows:

- The first line contains the values of integers  $b$  and  $w$ .
- The next line contains the values of integers  $bc$ ,  $wc$ , and  $z$ .

## Constraints

$$1 \leq t \leq 10$$

$$0 \leq b, w, bc, wc, z \leq 10^9$$

## Output Format

$t$  lines, each containing an integer: the minimum amount of units Taum needs to spend on gifts.

## Sample Input

STDIN	Function
5	t = 5
10 10	b = 10, w = 10
1 1 1	bc = 1, wc = 1, z = 1
5 9	b = 5, w = 5
2 3 4	bc = 2, wc = 3, z = 4
3 6	b = 3, w = 6
9 1 1	bc = 9, wc = 1, z = 1
7 7	b = 7, w = 7
4 2 1	bc = 4, wc = 2, z = 1
3 3	b = 3, w = 3
1 9 2	bc = 1, wc = 9, z = 2

## Sample Output

20  
37  
12  
35  
12

## Explanation

- *Test Case #01:*

Since black gifts cost the same as white, there is no benefit to converting the gifts. Taum will have to buy each gift for 1 unit. The cost of buying all gifts will be:  $b * bc + w * wc = 10 * 1 + 10 * 1 = 20$ .

- *Test Case #02:*

Again, he cannot decrease the cost of black or white gifts by converting colors.  $z$  is too high. He will buy gifts at their original prices, so the cost of buying all gifts will be:

$$b * bc + w * wc = 5 * 2 + 9 * 3 = 10 + 27 = 37.$$

- *Test Case #03:*

Since  $bc > wc + z$ , he will buy  $b + w = 3 + 6 = 9$  white gifts at their original price of 1.  $b = 3$  of the gifts must be black, and the cost per conversion,  $z = 1$ . Total cost is  $9 * 1 + 3 * 1 = 12$ .

- *Test Case #04:*

Similarly, he will buy  $w = 7$  white gifts at their original price,  $wc = 2$ . For black gifts, he will first buy white ones and color them to black, so that their cost will be reduced to  $wc + z = 2 + 1 = 3$ . So cost of buying all gifts will be:  $7 * 3 + 7 * 2 = 35$ .

- *Test Case #05:* He will buy black gifts at their original price,  $bc = 1$ . For white gifts, he will first black gifts worth  $bc = 1$  unit and color them to white for  $z = 2$  units. The cost for white gifts is reduced to

$wc = bc + z = 2 + 1 = 3$  units. The cost of buying all gifts will be:  $3 * 1 + 3 * 3 = 3 + 9 = 12$ .