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Problem

An electronics shop sells red and blue lamps. A red lamp costs X rupees and a blue lamp costs Y rupees.

Chef is going to buy **exactly** N lamps from this shop. Find the **minimum** amount of money Chef needs to pay such that at least K of the lamps bought are red.

Input Format

- The first line of input will contain a single integer T, denoting the number of test cases.
- Each test case consists of a single line containing four space-separated integers N, K, X, Y.

Output Format

For each test case, output on a new line the minimum amount of money Chef needs to pay in order to buy N lamps such that at least K of the lamps bought are red.

Constraints

- $1 \leq T \leq 10^3$
- $1 \leq N \leq 10^8$
- $0 \leq K \leq N$
- $1 \leq X, Y \leq 10$

Sample 1:

Input	Output
4 2 2 5 1 4 1 3 1 3 0 4 7 5 2 3 4	10 6 12 15

Explanation:

Test case 1: Chef buys 2 red lamps with $2 \cdot 5 = 10$ rupees.

Test case 2: Chef buys 1 red lamp and 3 blue lamps with $1 \cdot 3 + 3 \cdot 1 = 6$ rupees.

Test case 3: Chef buys 3 red lamps with $3 \cdot 4 = 12$ rupees.