Problem G
Get Good

Charlie is desperate to improve his programming skills.

Starting fresh, he can work hard and gain a skill points per day for x consecutive days, after which he is tired. For as long as he carries on tired, he will gain b skill points per day. Alternatively, he can choose at any time to take a break of y consecutive days, after which he can start afresh.

There are only n days available before the big contest, and Charlie starts fresh on day 1. Help him find the maximum skill points obtainable.

Input

The first line of input contains the number of cases, t ($1 \leq t \leq 10,000$).

Each test case consists of five integers n, a, b, x, y, ($1 \leq n \leq 10^9$): the number of available days, ($10^9 \geq a \geq b \geq 1$) the daily skill points when fresh or tired, ($1 \leq x, y \leq 10^9$) the numbers of days of higher skill gain and break.

Output

For each test case, output a single integer representing the maximum skill points obtainable.

Sample Input 1

```
6
2 2 2 2 2
4 4 2 3 3
5 3 2 3 1
5 4 1 3 1
99 80 40 30 5
10 6 1 6 1
```

Sample Output 1

```
4
14
13
16
7120
54
```

Sample Input 2

```
3
1 1 1 1 1
100000000 100000000 100000000 100000000 100000000
91965976 48437754 31825605 1671338 8268468
```

Sample Output 2

```
1
10000000000000000
2954637341500842
```

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