



A. Shashliks

time limit per test: 1 second
 memory limit per test: 256 megabytes

You are the owner of a popular shashlik restaurant, and your grill is the heart of your kitchen. However, the grill has a peculiarity: after cooking each shashlik, its temperature drops.

You need to cook as many portions of shashlik as possible, and you have an unlimited number of portions of two types available for cooking:

- The first type requires a temperature of at least a degrees at the start of cooking, and after cooking, the grill's temperature decreases by x degrees.
- The second type requires a temperature of at least b degrees at the start of cooking, and after cooking, the grill's temperature decreases by y degrees.

Initially, the grill's temperature is k degrees. Determine the maximum total number of portions of shashlik that can be cooked.

Note that the grill's temperature can be negative.

Input

Each test contains multiple test cases. The first line contains the number of test cases t ($1 \leq t \leq 10^4$). The description of the test cases follows.

The only line of each test case contains five integers k, a, b, x , and y ($1 \leq k, a, b, x, y \leq 10^9$) — the initial temperature of the grill, the required temperature for cooking the first and second types of shashlik, respectively, as well as the temperature drop after cooking the first and second types of shashlik, respectively.

Output

For each test case, output a single integer — the maximum number of portions of shashlik that you can cook.

Example

input	Copy
5	
10 3 4 2 1	
1 10 10 1 1	
100 17 5 2 3	
28 14 5 2 4	
277 5 14 1 3	
output	Copy
8	
0	
46	
10	
273	

Note

In the first test case, it is advantageous to cook 7 portions of the second type of shashlik; after that, the grill's temperature will be 3 degrees, and we can cook one more portion of the first type of shashlik.

In the second test case, we cannot cook either type of shashlik because the grill is too cold.

In the fourth test case, it is advantageous to cook 8 portions of the first type of shashlik; after that, it will be possible to cook another 2 portions of the second type of shashlik.

Codeforces Round 1031 (Div. 2)

Contest is running

01:56:34

Contestant



→ Submit?

Language: GNU G++23 14.2 (64 bit, ms) ▼

Choose file: No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

→ Last submissions

Submission	Time	Verdict
324459165	Jun/15/2025 12:07	Pretests passed

→ Score table

	Score
Problem A	494
Problem B	741
Problem C	1235
Problem D	1729
Problem E	2470
Problem F	2964
Successful hack	100
Unsuccessful hack	-50
Unsuccessful submission	-50
Resubmission	-50

* If you solve problem on 00:03 from the first attempt

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