6512   Assignments

When Starfleet headquarters gets a request for an exploration expedition, they need to determine which ship from those currently docked in the docking bay to send. They decide to send whichever ship is currently able to make the expedition based on how much fuel is currently stored on the ship as well as how long it will take the ship to arrive at the expected destination. Due to the age and current maintenance of the ships, each ship travels at a different top speed and has a different fuel consumption rate. Each ship reaches its top speed instantaneously.

Input

Input begins with a line with one integer T $(1 \leq T \leq 50)$ denoting the number of test cases. Each test case begins with a line with two space-separated integers N and D, where N $(1 \leq N \leq 100)$ denotes the number of ships in the docking bay and D $(1 \leq D \leq 10^6)$ denotes the distance in light-years to the expedition site. Next follow N lines with three space-separated integers v_i, f_i, and c_i, where v_i $(1 \leq v_i \leq 1000)$ denotes the top speed of ship i in light-years per hour, f_i $(1 \leq f_i \leq 1000)$ denotes the fuel on ship i in kilos of deuterium, and c_i $(1 \leq c_i \leq 1000)$ denotes the fuel consumption of ship i in kilos of deuterium per hour.

Output

For each test case, print a single integer on its own line denoting the number of ships capable of reaching the expedition site. Be careful with integer division!

Sample Input

```
2
3 100
52 75 10
88 13 44
56 9 5
2 920368
950 950 1
943 976 1
```

Sample Output

```
2
1
```