Problem A
Ecological Premium

Input: standard input
Output: standard output
Time Limit: 1 second
Memory Limit: 32 MB

German farmers are given a premium depending on the conditions at their farmyard. Imagine the following simplified regulation: you know the size of each farmer's farmyard in square meters and the number of animals living at it. We won't make a difference between different animals, although this is far from reality. Moreover you have information about the degree the farmer uses environment-friendly equipment and practices, expressed in a single integer greater than zero. The amount of money a farmer receives can be calculated from these parameters as follows. First you need the space a single animal occupies at an average. This value (in square meters) is then multiplied by the parameter that stands for the farmer's environment-friendliness, resulting in the premium a farmer is paid per animal he owns. To compute the final premium of a farmer just multiply this premium per animal with the number of animals the farmer owns.

Input

The first line of input contains a single positive integer **n (<20)**, the number of test cases. Each test case starts with a line containing a single integer **f (0<f<20)**, the number of farmers in the test case. This line is followed by one line per farmer containing three positive integers each: the size of the farmyard in square meters, the number of animals he owns and the integer value that expresses the farmer’s environment-friendliness. Input is terminated by end of file. No integer in the input is greater than **100000** or less than **0**.

Output

For each test case output one line containing a single integer that holds the summed burden for Germany's budget, which will always be a whole number. Do not output any blank lines.

Sample Input

```
3
5
1 1 1
2 2 2
3 3 3
2 3 4
8 9 2
3
9 1 8
6 12 1
8 1 1
3
10 30 40
9 8 5
100 1000 70
```

Sample Output

```
38
86
7445
```

(The Joint Effort Contest, Problem setter: Frank Hutter)