You just inherited the rights to n previously unreleased songs recorded by the popular group Raucous Rockers. You plan to release a set of m compact disks with a selection of these songs. Each disk can hold a maximum of t minutes of music, and a song can not overlap from one disk to another. Since you are a classical music fan and have no way to judge the artistic merits of these songs, you decide on the following criteria for making the selection:

1. The songs will be recorded on the set of disks in the order of the dates they were written.
2. The total number of songs included will be maximized.

Input

The input consists of several datasets. The first line of the input indicates the number of datasets, then there is a blank line and the datasets separated by a blank line.

Each dataset consists of one line containing the values of n, t and m (integer numbers) followed by a line containing a list of the length of n songs, $t_1, t_2, ..., t_n$ ordered by the date they were written (Each t_i is less than t minutes long and $\sum_{i=1}^{n} t_i > m \times t$.)

Output

For each dataset, the output consists of one integer indicating the number of songs that, following the above selection criteria will fit on m disks.

Print a blank line between consecutive datasets.

Sample Input

```
2

10 5 3
3, 5, 1, 2, 3, 5, 4, 1, 1, 5

1 1 1
1
```

Sample Output

```
6

1
```