Strong

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	512 megabytes

Y thinks an array is strong if and only if the sum of all numbers in it is no bigger than r and no less than l.

He obtained an array containing n integers, and he wants to select as many strong blocks as possible from it. A block of an array is a continuous part of the array. The blocks selected cannot overlap.

How many strong blocks he can select at most?

Input

The first line contains an integer $T(1 \leq T \leq 5 \times 10^3)$, the number of test cases.

For each test case:

The first line contains three integers $n, l, r(1 \leq n \leq 5 \times 10^3, -10^9 \leq l \leq r \leq 10^9)$, the length of the array, and the lower and the upper limit on the sum of a strong array.

Then follow a line containing n integers $a_1, a_2, .., a_n(|a_i| \leq 10^9)$, the elements in the array.

It's guaranteed that the sum of n of all test cases doesn't exceed 5×10^3.

Output

For each test case, print a single line containing the answer.

Example

standard input	standard output
1 10 2 10 -1 2 -3 4 -5 6 -7 8 -9 10	5