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# King of Karaoke

Input file:            **standard input**  
Output file:           **standard output**  
Time limit:            1 second  
Memory limit:         256 megabytes

It's Karaoke time! DreamGrid is performing the song *Powder Snow* in the game *King of Karaoke*. The song performed by DreamGrid can be considered as an integer sequence  $D_1, D_2, \dots, D_n$ , and the standard version of the song can be considered as another integer sequence  $S_1, S_2, \dots, S_n$ . The score is the number of integers  $i$  satisfying  $1 \leq i \leq n$  and  $S_i = D_i$ .

As a good tuner, DreamGrid can choose an integer  $K$  (can be positive, 0, or negative) as his tune and add  $K$  to **every** element in  $D$ . Can you help him maximize his score by choosing a proper tune?

## Input

There are multiple test cases. The first line of the input contains an integer  $T$  (about 100), indicating the number of test cases. For each test case:

The first line contains one integer  $n$  ( $1 \leq n \leq 10^5$ ), indicating the length of the sequences  $D$  and  $S$ .

The second line contains  $n$  integers  $D_1, D_2, \dots, D_n$  ( $-10^5 \leq D_i \leq 10^5$ ), indicating the song performed by DreamGrid.

The third line contains  $n$  integers  $S_1, S_2, \dots, S_n$  ( $-10^5 \leq S_i \leq 10^5$ ), indicating the standard version of the song.

It's guaranteed that at most 5 test cases have  $n > 100$ .

## Output

For each test case output one line containing one integer, indicating the maximum possible score.

## Example

standard input	standard output
2	3
4	1
1 2 3 4	
2 3 4 6	
5	
-5 -4 -3 -2 -1	
5 4 3 2 1	

## Note

For the first sample test case, DreamGrid can choose  $K = 1$  and changes  $D$  to  $\{2, 3, 4, 5\}$ .

For the second sample test case, no matter which  $K$  DreamGrid chooses, he can only get at most 1 match.