Eliminate Maximum Number of Monsters

You are playing a video game where you are defending your city from a group of n monsters. You are given a **0-indexed** integer array dist of size n, where dist[i] is the **initial distance** in kilometers of the ith monster from the city.

The monsters walk toward the city at a **constant** speed. The speed of each monster is given to you in an integer array speed of size n, where speed[i] is the speed of the ith monster in kilometers per minute.

You have a weapon that, once fully charged, can eliminate a **single** monster. However, the weapon takes **one minute** to charge. The weapon is fully charged at the very start.

You lose when any monster reaches your city. If a monster reaches the city at the exact moment the weapon is fully charged, it counts as a **loss**, and the game ends before you can use your weapon.

Return *the **maximum** number of monsters that you can eliminate before you lose, or* n *if you can eliminate all the monsters before they reach the city.*

Example 1:

Input: dist = [1,3,4], speed = [1,1,1]

Output: 3

Explanation:

In the beginning, the distances of the monsters are [1,3,4]. You eliminate the first monster.

After a minute, the distances of the monsters are [X,2,3]. You eliminate the second monster.

After a minute, the distances of the monsters are [X,X,2]. You eliminate the thrid monster.

All 3 monsters can be eliminated.

Example 2:

Input: dist = [1,1,2,3], speed = [1,1,1,1]

Output: 1

Explanation:

In the beginning, the distances of the monsters are [1,1,2,3]. You eliminate the first monster.

After a minute, the distances of the monsters are [X,0,1,2], so you lose.

You can only eliminate 1 monster.

Example 3:

Input: dist = [3,2,4], speed = [5,3,2]

Output: 1

Explanation:

In the beginning, the distances of the monsters are [3,2,4]. You eliminate the first monster.

After a minute, the distances of the monsters are [X,0,2], so you lose.

You can only eliminate 1 monster.

Constraints:

- n == dist.length == speed.length
- $1 <= n <= 10^5$
- $1 <= dist[i], speed[i] <= 10^5$