Ancient Treasure Hunt

In a faraway land, there lies a map that holds the key to an ancient treasure. However, the map is not an ordinary one; it's encoded in two scrolls, each filled with a mystical sequence. To uncover the map's secrets, you must find the length of the longest shared path between these scrolls.

Input format:

The input consists of multiple test cases. Each test case represents a pair of scrolls. The scrolls are unique and ancient inscription. Your task is to find the length of the longest shared path between them.

Output format:

For each test case, print the length of the longest shared path between the scrolls.

Construction:

The scroll's inscription have lengths between 1 and 1000 characters.

The inscription consist of ancient symbols.

The inscription are unique for each test case.

Time limit: 2 secs

Input:

2

Scroll1

Scroll2

Ancient

Inscription

Output:

6

4