Problem J
Communications
Time Limit: 1 second

Alice and Bob want to establish a secret mechanism for communications. To send a message M to Bob, Alice generates two messages m_1 and m_2 from M.

- Each of the letters in M can be possibly deleted to generate m_i (i=1,2). However, Alice does not necessarily delete any letter in M to construct m_1 or m_2.
- None of the letters in M can be deleted in both m_1 and m_2.

Alice sends m_1 and m_2 to Bob. Then Bob will try to reconstruct the original message M.

All messages contain only lower-case letters of the Latin alphabet.

Input

The input contains two lines, each one of them is a received variation of the initial message M. The length of m_1 and m_2 does not exceed 1,000 characters. Each letter in the original message M always exists in at least one of the two messages m_1 and m_2.

Output

Display the length of the shortest message M that can be reconstructed from m_1 and m_2.

Note: The length of M is no more than the sum of the lengths of m_1 and m_2.

Sample Input	Sample Output
abraaabra abacadaba	11

Explanation: One possible shortest message M is `abracadabra`