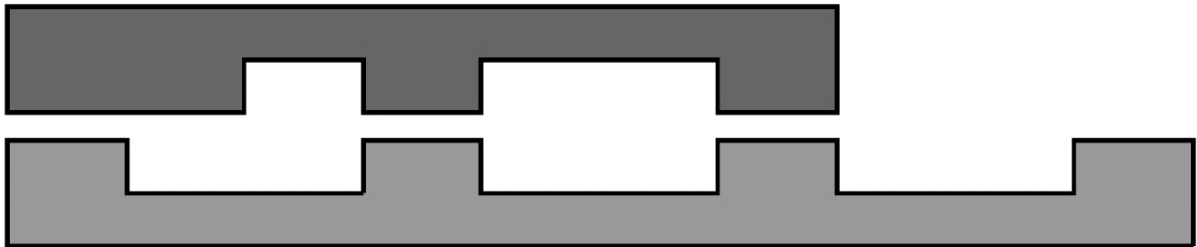


## Gear Switching

The research laboratory of a top automobile company has been tasked with creating a transmission mechanism that allows for extremely efficient kickdown, which is the process of shifting to a lower gear. After extensive research, the engineers have determined that the most effective solution involves using specialized gears with non-uniformly placed teeth and cavities. The optimal flanks of the gears have already been calculated, and now the engineers want to conduct experiments to prove their theories.

For the experiment, two planar toothed sections are required, one for the master gear (with teeth at the bottom) and one for the driven gear (with teeth at the top). Each section unit is either a cavity of height  $h$  or a tooth of height  $2h$ , and the sections can be joined together by shifting them along each other.



The laboratory has a long strip of width  $3h$  that is sufficient for cutting two engaged sections at once. The engineers want to minimize the length of the strip used for cutting both sections simultaneously because the strip is made of an expensive alloy.



### Input

The input file consists of two lines, each containing a string that describes a section. The first line describes the master section (teeth at the bottom), and the second line describes the driven section (teeth at the top). Each character in a string represents a section unit, with 1 representing a cavity and 2 representing a tooth. The sections cannot be flipped or rotated, and each string is non-empty and has a maximum length of 100.

### Output

You should output a single integer that represents the minimal length of the strip required for cutting both sections simultaneously.

Sample Input 1 2121212 1212121	Sample Input 2 2112112112 2212112	Sample Input 3 11222112 21212
Sample Output 1 7	Sample Output 2 10	Sample Output 3 11