

B. "Heading to the top"

Statement

MetalliKer, Red Hot Kerli Peppers, Van Kerlen or Freddie MerKerie? Finding a band name isn't always that easy... Talented as they are, our musicians can't seem to find an agreement on the name of their band. Knowing your reasoning skills, they come to see you and implore you to help them!



Obliging as you are, you offer to rate the names they suggest you by giving them a score in order to help them choose the best name. Thanks to an analysis of the names of the most famous bands of the last century, you managed to establish the following rules to give a score to these names :

For the last time, Kjjfrpk is NOT a good band name!

- Give a number of points equal to the difference between twice the number of vowels, and the number of consonants in the word (this difference might be negative);
- If the substring 'ker' appears at least once in the word, give a bonus of 5 points (applies once);
- Finally, if the word is a palindrome, double the total score if it is positive.

It now your turn to output the score of the name you are given!

Notes :

- *We define a 'substring' as a contiguous string included in another string;*
- *Vowels are : a, e, i, o, u, y;*
- *There is no palindrome in the 'easy' test set.*

Input

On one line, the string of size s ($1 \leq s \leq 10^5$)

Output

Print on one line an integer corresponding to the **total score of the name you are given**.

Examples

Example 1

Input	Output
rekker	10

In this first example, 'rekker' contains 2 vowels and 4 consonants, which leads to a sub-score of $2 \cdot 2 - 4 = 0$. The name contains the substring 'ker', so we give a bonus of 5 points to the score. We double the total score of $0 + 5 = 5$ because the name is a palindrome (you can read it forward as well as backward), which leads to a final score of 10.

Example 2

Input	Output
okerboomerker	10

In this second example, there are 6 vowels and 7 consonants in the word given, which leads to a base score of 5. It contains twice the substring 'ker', so we add 5 (only once) to the base score, which leads to a score of 10. Since the word is not a palindrome, we don't double it, and the final score remains 10.

Example 3

Input	Output
sharrahs	-2

In this third example, there are 2 vowels and 6 consonants in the word, leading to a base score of -2. Even if it is a palindrome, since the score is negative we don't double it, and the final score remains -2.