

During recent RPC training competitions, the chief judge was very concerned about the rounding problems in some of the test cases. Since they are a common source of mistakes among the contestants, he decided that from this moment on, his problems must have their answers written in the form of equivalent proper fractions. As he has written more than 2000 exercises this year, it would be quite tasking for him to change every single test case by hand, so he needs a very smart team to be able to take all the answers and convert them into their equivalent mixed number.

Note: We encourage you to learn more about the subject, which will serve you well in future programming contests and software development in general. See, for example, <http://floating-point-gui.de/>

Input

There can be many test cases, each one described in a single line with a number D , which needs to be converted. If D is a periodic number, its period is written in parentheses.

The number of digits after the decimal point and before the parentheses, and the number of digits inside the parentheses will be at most 8.

$$-10^6 \leq D \leq 10^6$$

Output

For each input case, you are to write the corresponding mixed number in a single line, such that the integer part is separated from the fraction by a space. The fraction must be proper—it should be in the form p/q , where p and q are coprimes and $p < q$.

Sample Input

```
1.5
10
0.(3)
```

Sample Output

```
1 1/2
10
1/3
```