G. The Fraction

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Periodic decimal fraction is usually written as: `[entire_part.non-periodic_part (period)]`. Any simple fraction can be represented as a periodic decimal fraction and vice versa. For example, the decimal fraction $0.2(45)$ corresponds to a fraction $27 /$ 11 0. Your task is to convert the periodic fraction to a simple periodic fraction.

Input

The first line contains the periodic decimal fraction x ($0 < x < 1$) in the format described in the statement. The total number of digits in the period and non-periodic part of the fraction does not exceed 8. Non-periodic part may be absent, the periodic part can't be absent (but it can be equal to any non-negative number).

Output

Print the representation of the fraction x as a simple fraction p / q, where p and q are mutually prime integers.

Examples

input
0.2(45)
output
27/110

input
0.75(0)
output
3/4