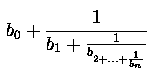
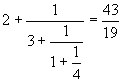
|  |
| --- |
| **Continued Fractions** |

Let ***b***0, ***b***1, ***b***2,..., ***b***n be integers with ***b***k > 0 for ***k*** > 0. The *continued fraction* of order ***n*** with coeficients ***b***1, ***b***2,..., ***b***n and the initial term***b***0 is defined by the following expression



which can be abbreviated as [***b***0;***b***1,..., ***b***n].

An example of a continued fraction of order ***n*** = 3 is [2;3, 1, 4]. This is equivalent to



Write a program that determines the expansion of a given rational number as a continued fraction. To ensure uniqueness, make ***b***n > 1.

**Input**

The input consists of an undetermined number of rational numbers. Each rational number is defined by two integers, numerator and denominator.

**Output**

For each rational number given in the input, you should output the corresponding continued fraction.

**Sample Input**

43 19

1 2

**Sample Output**

[2;3,1,4]

[0;2]

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