Problem E
Gambling Game

The Ionian Commission on Procuring Cash has come up with a new gambling game to raise funds for the government. The game is played as follows: Each week, the government will televise a set of m balls (numbered $1 \ldots m$) being selected one at a time without replacement. Anyone who wants to play will have to buy a game card. Each card contains n squares (where $n \leq m/2$) and in each square are two numbers between 1 and m. No number appears more than once on a card. A sample card is shown in Figure E.1.

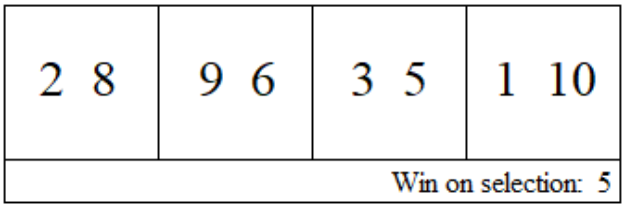

Figure E.1: Sample game card with $m = 10$, $n = 4$ and $p = 5$.

After each ball is selected, players cover any square which contains that number (there will be at most one such square on any card). Each game card also has a number p printed on it, and a contestant wins if he or she covers all n squares after exactly p ball selections (i.e., prior to the p^{th} selection, they only had $n-1$ squares covered). Before issuing cards to its citizens, the government would like to get an idea of the likelihood of winning for various values of m, n and p so they can set up the payoffs appropriately. They have procured you to write a program to solve this problem.

Input

Input consists of a single line containing 3 integers m, n and p, as described above, where $2 \leq m \leq 33$, $0 \leq n \leq m/2$ and $0 \leq p \leq m$.

Output

Output the probability of winning on the p^{th} selection as a fraction `x/y` in simplest form.

Sample Input 1	Sample Output 1
`10 4 5`	`8/45`

Sample Input 2	Sample Output 2
`10 4 3`	`0/1`