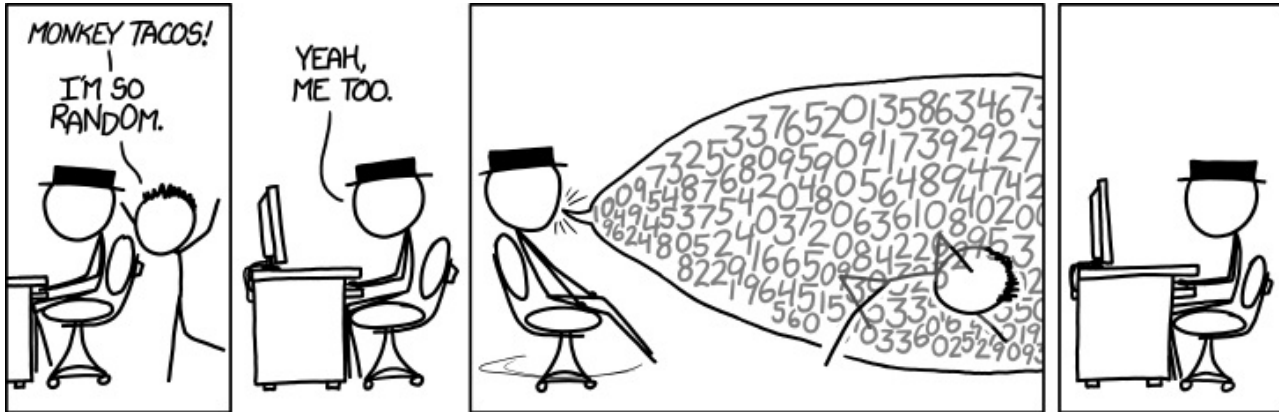


Sum of fractions



Description

Given a list of rational numbers, find the sum in reduced form. A positive fraction is in reduced form if the numerator and denominator are positive integers that have no common divisors greater than 1. (For example, $2/4$ in reduced form is $1/2$).

Input

The first line is an integer N . ($0 < N \leq 5$)

The next N lines will contain a rational number in the form A/B , where A and B are positive integers less than 500.

Output

Print the sum of the numbers in reduced form.

Examples

Input	Input	Input
2	2	3
$1/2$	$5/10$	$3/4$
$1/3$	$2/6$	$6/5$
		$342/8$
Output	Output	Output
$5/6$	$5/6$	$447/10$