

Question #2: Evaluating an infix expression

Write a C++ program to compute the value of an infix expression that uses only the following symbols:

+ (plus)
- (minus)
* (multiply)
/ (divide)
() (brackets/parentheses).

You can assume that the expression has only numbers, and no variables in it. The program should be able to recognize integers (and therefore rational numbers). It should not convert to decimal but keep the result as integers (or rational numbers).

E.g., $(7/5 + 233/47) * 67 + 143/45$