Sophia Colonello Chapter 5 Test Corrections

(I’m practically starting from scratch and I will try and break it up by section which I have labeled on my code)

* CHANGE 1: variables
  + Line 17 (new): added variable String element for each section of the expressionStr variable
    - This was needed so I could get rid of the spaces properly
  + Line 18 (original): changed total to calc
    - This wasn’t necessarily needed, but I wanted to change it
* CHANGE 2: array for expressions
  + Line 22 (original): changed ArrayList expression from Object to String
    - This was needed so I could properly parse the Strings into Doubles for the calculations
    - I did this incorrectly before, trying to use an Object to store different values in the array when I should’ve stuck with Strings and parsing
* CHANGE 3: getting the elements into the arraylist
  + Lines 35-40 (original): kept the for loop, but included an if else if statement to properly break up the expressionStr
    - Lines 37-49 (new): if/else if/else statement that checks for number/symbol using the variable element and adds it to the expression arraylist and removes the spaces
      * Lines 37-41 (new): if statement to check for a number or symbol, adds the number or symbol and resets the element variable
      * Lines 42-47 (new): else if statement to check if it’s the last element, adds the element to the arraylist, and resets the element value
      * Lines 48-49 (new): else statement to add the number or the symbol
      * This was needed so I could get multiple digit numbers as well as not including the spaces in the arraylist
      * I did this incorrectly before by not taking the time to get rid of the spaces, causing issues with moving forward
* CHANGE 4:
  + Lines 55-101 (original): kept everything in a while loop (so an answer is derived) and split the (\*/) and (+-) up into two separate for loops
    - This was needed so I could check for all the (\*/) first before moving onto the (+-) while also going until an one answer is reached
    - Previously, I tried combining both sets (\*/) and (+-), which proved unsuccessful as the (\*/) set must go first
    - Lines 57-78 (new): for loop with an if/else if statement for (\*/)
      * Lines 60-68 (new): if statement checks to see if the element is a \*, if it is, it parses and multiplies the two values by the \*, removes both of those numbers, then stores the product in the arraylist
        + This was needed so I could check for multiplication and properly do the math
      * Lines 69-77 (new): else if statement checks to see if the element is a /, if it is, it parses and divides the two values by the /, removes both of those numbers, then stores the dividend in the arraylist
        + This was needed so I could check for division and properly do the math
    - Lines 79-100 (new): for loop with an if/else statement for (+-)
      * Lines 82-90: if statement checks to see if the element is a +, if it is, it parses adds the two values by the +, removes both of those numbers, then stores the sum in the arraylist
        + This was needed so I could check for a and addition do the math
      * Lines 91-99 (new): else if statement checks to see if the element is a -, if it is, it parses and subtracts the two values by the -, removes both of those numbers, then stores the result in the arraylist
        + This was needed so I could check for subtraction and properly do the math