1 Over the phone, your young friend tells you all her homework problems are the same format: one over something plus one over something all over one over something plus one of something. What does she mean in conventional math notation?

2 You decide to write a computer program to solve all the problems quickly, and make sure she got the right answers by hand. How many variables do you need per question?

3 Start a new program in your TI-8\* by pressing PRGM and moving over to NEW. Select “Create New”. What should you title your program to find it easily later? (Consider using 2ND-ALPHA to be able to type a string of letters more easily.)

4 For your first line of code, you should tell the user what is about to happen. Press PRGM, move over to I/O, and choose 3: DISP. To say some text (and not use letters as variables), surround the text with quotation marks. Where are is that symbol on the TI-8\*?

5 After you have declared your program’s intentions, we need to ask for those variables. Press PRGM, then I/O, and select PROMPT followed by the first variable name you chose. Press enter, and create a prompt for each variable you need.

6 Enter the formula as you wrote it in problem 1. We will want to answer as a fraction, append your formula with the conversion tool that does so. Where is “convert to fraction” on your TI-8\*?

7 Test your program by quitting back to the main screen and EXECuting (running) your program. Did it work?

8 Quickly run through example problems, using 2nd-ENTER to re-execute the program after it finishes. Record several examples here.

9 Briefly chart out how you think a program to compute instances of the quadratic formula might flow. What would you need to know in order to make such a program work?

10 Describe a hypothetical program that might save you time vis-à-vis a computation you often retype out each time

11 In your own words, describe what you think the point of this problem set is.