**Final Project**

Little Red Schoolhouse Programming Company has been contracted to write a program to assist elementary school children with learning how to add, subtract, multiply, and divide mixed numbers. The program must strictly adhere to the following:

1. The program must inquire from the student how many sample problems they wish to do, and in what file to record their responses. If a file by that name already exists on the computer, the program must ask the student if they wish to overwrite that file or create a new one.
2. The program must randomly generate two positive mixed numbers that are properly reduced as well as an operation for the student to perform. The first number generated must be greater than the second number generated.
3. Generated fraction denominators shall be between 2 and 20. Whole number portions of the mixed numbers shall be between 0 and 20.
4. The student shall enter their answer and the program will tell them if their answer is correct or partially correct. Fully correct answers are properly reduced, whereas partially correct answers are equivalent values that are not properly reduced. A full point of credit is given for each fully correct answer, and a half point credit is given for each partially correct answer.
5. If the student gives the correct answer, a congratulatory message is printed on the screen. If the student gives a partially correct answer, then a partially congratulatory message is given as well as the correct answer. If an incorrect answer is given, then a consolatory message with the correct answer is given.
6. The program shall write a file that records all of the problems given to the student with the student's response and the correct answer (if necessary). No congratulatory or consolatory messages are to be written to this file.
7. At program termination, the student's total score and a percentage will be displayed on the screen as well as recorded in the file. The program should notify the student.

**Extra Credit:**

Do the above correctly for positive and negative mixed numbers.