MATH 30 TEST 4 **First and Last Name:** _____

A few EXTRA review problems - ADDITIONAL TO the sample test and study guide already provided

DIRECTIONS: Here are some problems I typed up from the Review sections and Test sections of the chapters in your textbook - **Bittinger edition 7** - to help us today and as a reminder that your textbook is a FANTASTIC tool for learning in general and test-prep in particular. I've listed the problem numbers so you can look the answers up in the back of your textbook. **Be sure to use ALL your resources as you prepare for tests:** other problems in your textbook, your notes, the review test online, corrected quizzes (or TPQs) and the study guide provided online.

A) Compare the following two problems. What is similar? What is different? Other than reading the directions, how can you identify how to work each?

Page 438 # 34

Simplify: $\frac{3x}{x+2} - \frac{x}{x-2} + \frac{8}{x^2-4}$

Page 438 # 42

Solve: $1 = \frac{2}{x-1} + \frac{2}{x+2}$

B) Simplify each radical expression completely.

Page 693 # 25

$\sqrt{250x^3y^2}$

Page 693 # 29

$\frac{\sqrt[3]{60xy^3}}{\sqrt[3]{10x}}$

Page 694 # 34

$\sqrt{50} + 2\sqrt{18} + \sqrt{32}$

Page 694 # 41

$\frac{4\sqrt{5}}{\sqrt{2}+\sqrt{3}}$

C) Solve

Page 694 # 43

$\sqrt{y+6} - 2 = 3$

Page 694 # 45

$1 + \sqrt{x} = \sqrt{3x-3}$

Page 695 # 20

$x = \sqrt{3x+3} - 1$

Page 438 # 43

Jackson can sand the oak floors and stairs in a two-story home in 12 hr. Charis can do the same job in 9 hr. How long would it take if they worked together?

Page 371 # 24

The length of a rectangle is $6m$ more than the width. The area of the rectangle is $40m^2$ Find the length and width.

Page 370 # 48

The square of a number is 12 more than the number. Find all such numbers.

Page 372 # 35

A 13-ft ladder is placed against a building in such a way that the distance from the top of the ladder to the ground is 7 ft more than the distance from the bottom of the ladder to the building. Find both distances.