ALGEBRA FOR CALCULUS Stretch II Topics List for Exam III

From the intermediate algebra text chapter 5

**Section 5.1 IA Rational Expressions and Funtions**

Be able to:

* State the domain of a rational function using interval notation
* Determine what is a rational expression from a list of expressions (see class notes)
* Simplify rational expressions. How do we know when a rational expression is simplified?
* Multiply Rational Expressions
* Divide Rational Expresssions

**Section 5.2 IA LCMS, LCDs, Addition and Subtraction of Rational Expressions**

Be able to:

* Find the LCM of several algebraic expressions by factoring
* Add and subtract rational expressions with like denominators
* Add and subtract rational expressions with unlike denominators

**Section 5.4 IA Complex Rational Expressions**

Be able to:

* Simplify complex rational expressions using either method 1 or method 2

**Section 5.5 IA Solving Rational Equations**

Be able to:

* Solve rational equations
* Check for extraneous solutions

**Section 5.6 IA Applications and Proportions**

Be able to:

* Solve work problems using rational equations HW 1,3,5,9 on p. 461 IA text
* Solve applied problems using proportions HW 11 – 21 odd on p. 462 IA text
* Solve motion problems using rational equations HW 27 – 33 odd on p. 464 IA text
* Know D = RT and use it in the set up of the motion problem.

Good problems to study: all the homework problems for each section and the review on MYLABSPLUS software.