

Study Guide for Test #3 – M120 F15

This test is on Chapter 12 material. This material covers all rational expressions. You should study CW Quizzes from Chapter 12, HW from Chapter 12 (10/14, 10/21 & 10/28) as well as the Practice Test #3. You may want to use the Ch. 12 Review and More as well.

- Finding the domain of a rational expression
 - Application of Zero Factor Property
- Simplifying a Rational Expression
 - Application of factoring
 - Application of Fundamental Theorem of Fractions (canceling)
- Multiplication & Division of Rational Expressions
 - Application of factoring
 - Application of multiplying & dividing fractions
- Function Notation to Add/Subtract/Multiply & Divide Functions
- Adding & Subtracting Rational Functions
 - Applying finding an LCD
 - Application of factoring
 - Application of simplification of rational expressions
- Simplifying Complex Fractions
 - Use of LCD's with Fundamental Theorem of Fractions to Simplify & the applying simplifying a rational expression
 - or**
 - Application of adding/subtracting rational expressions to simplify & apply division
- Similar Triangles
 - Application of proportions
- Variation Problems
 - Knowledge of constant of proportionality
 - Correct translation of direct, inverse and joint variation to create formula to use
- Solving Rational Equations
 - Knowledge of restrictions
 - Use of clearing to solve
 - Knowledge to distinguish linear & quadratic equations to solve
 - Knowledge to solve linear & quadratic equations
- Motion ($D=RT$) Problems
 - Knowledge to set up the problem using $T=D/R$
 - Knowledge of using sum or difference of time expressions to form a function to solve problems