

Things to Study for M110 Spring 2015 Test #3

Homework from Ch. 4.1 through 5.7

Classwork from Night 5 through Night 9

**Calculators are OK. Bring a calculator. Cell phone or other electronic not OK for calculator.

Detailed Topics Covered

- Simplifying an Algebraic Expression with Fractions
- Clearing an equation of fractions
- Solving linear equations in one variable equations
- Properties of the Real Numbers
 - Commutative, associative, identity, inverse of addition
 - Commutative, associative, identity, inverse of multiplication
 - Distributive property
- Solving a formula for a variable
- Word problems solved with systems of equations –
 - ticket sales, simple interest, chemistry, geometry
- Setting up a linear function from a story problem & answering questions about interpretations of slope, x-intercept and y-intercept and making predictions from the model
- Functions vs. Relations (how to tell a function via graph, equation, table of values)
- Domain & Ranges of Functions
 - Use interval or set builder notation to give these values
- Function Notation
 - Uses in evaluation (including evaluation with an expression), y-intercepts, x-intercepts & solving equations
- Slope-Intercept Form of a Line
 - For finding equations
 - For finding slope and y-intercept to graph
- X-intercepts
 - Finding and Interpreting
- Finding equations of lines using given information
 - such as slope, ordered pairs, equations of lines parallel & perpendicular and a graph of a line
- Point-slope form and its use in finding equations for lines (linear models)
- Solving simple and compound linear inequalities in one variable
 - Giving the solutions on a number line, using interval notation or set builder notation