

# [INTRODUCTORY ALGEBRA EXAM I REVIEW TOPICS]

(use this to make sure you are ready)

Below are the topics we have covered in the course so far listed by chapter. Any of these topics may show up on the exam.

## (chapter 3) – Using Slope to Graph Linear Equations

### (3.1) – graphing $y = mx + b$ (page 116)

- This section becomes obsolete once we learn how to easily find slope. Don't worry about this chapter

### (3.2) – Linear Models and Unit analysis (page 124)

- Know how to set up an equation and perform a unit analysis

### (3.3) – Slope of a line (133)

- Know rise over run
- Know how to calculate steepness of lines (which plane rises steepest? Which road is steepest? Etc)
- Know formula for slope
- Know the 4 different types of slope

### (3.4) – using slope to graph linear equations ( $y = mx + b$ ) (page 143)

- Know how to find slope and y-intercept from slope-intercept form of linear equations
- Know how to graph an equation in slope intercept form

### (3.5) – rate of change (page 155)

- Know that rate of change *is* slope
- If rate of change is constant, then graph is a line with that constant as the slope
- If graph is a line with constant slope, then the rate of change is also constant

## (chapter 4) – Simplifying Expressions and Solving Equations

### (4.1 & 4.2) – commutative, associative, and distributive properties (page 176) & Simplifying Expressions (page 185)

- Know commutative, associative, and distributive properties and how to use them to simplify expressions

### (4.3 & 4.4) – solving linear equations in one variable (page 190 & 200)

- Know the properties of equality
- Know what a conditional equation is
- Know what an inconsistent equation is
- Know what an identity equation is

### (4.6) – formulas (page 229)

- Know how to manipulate and use formulas

### (Additional Thoughts)

There is only 50 minutes to take the first exam – so clearly I won't be able to put ALL of the stuff on this review on the exam itself. As for review/practice problems, I am going to mostly leave that up to you. In the past I have made review assignments, but ultimately I am never able to make a "one-size-fits-all" review, mostly due to the fact that it's impossible to even do that – everyone will need to review different things. Therefore, I want you to go through this sheet and determine what the things you need to work on are. At the end of each section in the book there are problems you can do for practice (and yes we've done some of them before as homework, but it's always good to review problems we've done). Know that I'm not going to throw any curve balls on the exam; there won't be a question on the exam that we haven't gone over in class.