

## Math 211, Exam TWO Review

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### ***Exam Two is an in-class exam, given Tuesday, 11/25***

For Exam TWO you should study your assigned homework, the examples in our text and the class activities we have done for Sections 3.1, 3.2, 3.3, 3.4, 4.1 and 4.2.

- Exam One will be some combination of short problem solving questions, multiple choice questions and true/false questions.
- You may use your calculator and your personal manipulative kit during the exam.
- You may not use a cell phone or any other electronic device during the exam.
- You may use one side of a 3" x 5" note card of notes for the exam (15 in<sup>2</sup>).

### **CONCEPTS TO KNOW**

#### **Chapter Three Review Topics, page 209**

- 1abcef
- 3(all)
  - Including converting base number collections to the total number of units or converting base number collections to the minimal collection
  - Including sketching and explaining addition and subtraction with base number pieces and connecting this work to the standard paper and pencil algorithm
- 4
  - Including writing story problems for each of the three subtraction settings
  - The three division models: Sharing (portative), Measurement (subtractive) and Array. For each division model you should be able to:
    - Sketch, label and explain base 10 pieces modeling the division setting
    - Group objects to show the division setting (sharing and measurement only)
    - Write a simple story problem that illustrates the division setting (sharing and measurement only)
- 5ab and 6abc
  - Including modeling multiplication with rectangular arrays and connecting this work to the standard paper and pencil algorithm and partial products
- 7
  - Including explaining whether or not a given set under a given operation is closed or not closed and why
  - Including explaining whether or not a given set under a given operation has a property such as commutative, associative, etc. and why
- 11

#### **Chapter Four Review Topics, page 252**

- 1
  - The concepts of factor, divisibility and multiple / how to write symbolically (i.e.  $a \mid b$ ).
- 2, 4
  - Divisibility tests for 2, 3, 4, 5, 6, 9 and 10, what they are and how to apply them
- 5abcdi
- 6
  - The concept of Least Common Multiple, what it means, how to compute it, how to apply it and its relationship to GCF
  - The concept of Greatest Common Factor, what it means, how to compute it, how to apply it and its relationship to LCM

### **REVIEW PROBLEMS**

**Practice Problems: Chapter Three Test, page 210-211 # 1 – 6, 10 - 13, 15, 17, 18**

**Practice Problems: Chapter Four Test, page 252-253 # 1 - 15**

***Your exam will cover all assigned homework & class activities! Just studying the Chapter Test questions will not be a sufficient review for Exam Two***

**(over)**

***Study Ideas***

- Work problems from the text and the activity book; don't just read over already done work. The more problems you can work, the more confident you will be during the exam. One good strategy is to select problems from each section of the activity book and text and write them on a separate sheet of paper. Then do the problems in a timed setting to more closely mimic the exam environment. Study early so you can identify concepts that are giving you trouble and come to office hours or the tutoring center for help.
- Work with a study group, discuss ideas.