MA 159 Final Exam Memo/Preparation
Monday, December 10 – 10:20 AM (2 hour exam)
In Lambert Fieldhouse

**Note** the early time and have double and triple backup systems in place for making sure you do not oversleep the exam that morning. The Final Exam will be administered in the indoor Track and Field area of the Lambert Fieldhouse.

**Bring your Purdue ID to the Final Exam**

**Remember to be 15 to 20 minutes early to get your seat assignment. We have to start on time since there is an exam right after ours.**

**The final exam is comprehensive** and will cover types of problems and concepts from the entire semester. Approximately one third of the exam will cover problems from section 6.1 to the end of the semester, so there is a slight emphasis on the later material covered in the course.

**There are 30 multiple-choice questions** with only 5 choices for each problem instead of 9. In spite of the increased number of problems, and for various reasons I will not detail, the time pressure on students to finish the exam in the 2 hours allotted is little different than what you have experienced on the midterm exams. The vast majority of students will easily be finished showing me what they know before or well before the allotted 2 hours is expended.

The formulas given on the Final Exam will be the same as those given on Exam 3 plus the two Pythagorean Trig. Identities, the 3 double-angle formulas, and the 3 half-angle formulas mentioned in lectures. These 'Exam/Quiz Formulas' are posted on the MA 159 webpage.

MY PREPARATION SUGGESTIONS FOR THE FINAL EXAM (prioritized):

1. **The homework for the entire semester** is your best guide to what could appear on the Final Exam. I would look at every homework problem listed on the assignment sheet (bold and unbold) and start working some of the odd problems near those problems. Most students will not have to work very many of certain types of problems, so based on what you personally know and do not know pick and choose what sections you most need to focus on.

2. On the web page you will find a set of practice questions for the final exam. These are 66 multiple choice problems that are good to go through at some point. Try your best to figure out the solutions yourself. The detailed, worked out solutions are also posted to the webpage.

3. The old exams on the webpage are also good to practice. I have added copies of this semesters exams to the past exams link on the webpage.

4. **Review problems from the book.** Most of the review problems at the end of the chapters are applicable and the answers to all of those problems are in the back of the book. Below are listed the specific problems I listed on the exam memos plus a few new problems that cover the material since exam 3.

   p.50—12, 15, 19, 20, 22, 30, 31, 35, 38, 41, 45, 47, 50, 55, 60, 65, 68, 75, 77, 79, 85
   p.119— 4, 6, 7, 8, 9, 10, 13, 15, 25, 26, 29, 31, 32, 33, 38, 39, 42, 47, 50, 53, 55, 61, 63, 67, 68, 71, 74, 75, 78, 83
   p.205—1, 2, 3, 5, 6, 8, 11, 14, 16, 18, 19, 22, 23, 24, 25, 41, 42, 46, 49, 51, 53, 54, 57, 60, 64, 65, 66, 68, 69, 71, 74, 77, 78, 79, 84, 85
   p.272— 3, 4, 6, 9, 27, 29, 30, 32, 33, 36, 40, 41, 44, 46, 48, 49
   p.342—2, 3, 4, 5, 9, 12, 14, 15, 17, 21, 22, 25, 29, 35, 41, 45, 46, 56, 57, 58, 59, 60, 67, 75
   p.433— 1, 2, 3, 4, 7, 11, 13, 22, 23, 24, 27, 29, 30, 31, 37, 40, 42, 43, 46, 48, 58, 61, 62, 64, 65, 67, 68, 71, 73
   p.496 — 41, 42, 43, 51, 52, 53, 54, 55, 56
   p.648 — 1, 2, 3, 4, 5, 9, 59, 60, 61, 62, 64
   p.792 — 40, 41, 42, 43, 44, 46, 47, 48, 52, 53, 54, 56, 57, 58