**Exam 1 Review**

This exam covers sections 6.1, 6.3, 7.2, and 7.3 in your textbook, as well as all material from our quizzes, projects, and other in-class work so far. You should be able to do the following (associated textbook sections and assignments are listed in parentheses).

- Convert between angle measurements in degrees and radians. *(6.1)*
- Identify the standard angles. *(Identifying the Standard Angles Activity: Part 1, Quiz A)*
- Given an angle in degrees or radians, find one or more coterminal angles. *(6.1)*
- Find all six trig functions of any angle that either has its terminal side on an axis or has a reference angle of 30, 45, or 60 degrees. *(6.3, 7.2, Identifying the Standard Angles Activity: Part 2, Group Work 1, Quiz B)*
- Find the reference angle for any angle in degrees or radians. *(6.3, 7.2, Group Work 1)*
- Given a central angle of a circle, find the arc length that subtends it, or the area of the sector it encloses. You'll be given the formulas. *(6.1)*
- Given two sides of a triangle and the angle between them, find the triangle's area. You'll be given the formula. *(6.3)*
- Given the sine, cosine, secant, or cosecant of an angle, as well as its quadrant (or enough information to figure out its quadrant), find the other five trig functions of the angle. *(6.3, 7.2)*
- Identify the period, domain, and range of the functions $y = \sin x$, $y = \cos x$, and $y = \tan x$. *(7.3, Project 1, Project 2, Quiz C)*
- Identify the period, amplitude, and phase shift of a sine or cosine function, and graph one or two periods of the function. The 5 key points for each period should be clearly plotted. *(7.3, Group Work 2)*
- Find a possible sine or cosine equation for a given graph. *(7.3)*

Aside from the formulas mentioned above, you'll also receive the Fundamental Identities in the box on page 480 in your book for reference. You've already memorized *most* of the other information you'll need while studying for the quizzes.

For extra practice, try the following problems from the Chapter Reviews and Tests in your textbook. All of the solutions can be found in the appendix at the end of the book. This is true for both the eText and paper version.

**Chapter 6 Review (pg. 457):** 1, 3, 5, 11, 31, 33, 35, 39, 53
**Chapter 6 Test (pg. 461):** 1, 2, 4, 8
**Chapter 7 Review (pg. 522):** 3, 5, 7, 11, 13, 15, 23, 29, 33, 35, 37, 39
**Chapter 7 Test (pg. 524):** 2, 3, 6, 7, 11

**EXAM DATES**
**MWF Class:** This class will take the exam in two parts. Part 1 will be given on **Friday, 1/31**, and Part 2 on **Monday, 2/3**.
**TR Class:** This class will take the exam on **Thursday, 1/30**.

**Note:** Exam 2 will be shorter, so the MWF class will have one class period (1 hour 5 minutes) and the TR class will also have 1 hour 5 minutes.