Test 2 Preparation

1. The exam covers sections 6.5, 6.6, and 7.1-7.5.
2. Use your homework, class work, and examples from class as a study guide.
3. Memorize the following:

    a) The fundamental identities.
    b) The double angle identities.
    c) Sum/difference identities.
    d) The half angle identities.
    e) Law of Sines
    f) Law of Cosines
    g) Formulas for vectors: magnitude, direction angle, dot product, and angle between two vectors
    h) Absolute value of a complex number
    i) Trigonometric form of a complex number
    j) Product, division, and power/root formulas for complex numbers in trig form
    k) Any of the definitions or formulas needed from chapter 5 to complete chapters 6 and 7 homework (for example, you still need to know how to the find the exact trigonometric function of an angle whose reference angle is a special angle)
    l) Any other property needed to successfully complete the homework

4. A well-prepared student should be able to…

    a) evaluate the inverse trig function of a number exactly (when possible) and using a calculator.
    b) solve trigonometric equations by factoring, using the Quadratic Formula, squaring (and rooting) both sides of an equation, using your calculator, using trig identities, and using a combination of these methods.
    c) solve homework-like problems.
    d) solve triangles using the Laws of Sines and Cosines.
    e) add, subtract, and multiply (both scalar and dot) vectors in component form and **i** /**j** form.
    f) solve applications involving vectors.
    g) add, subtract, multiply, and divide complex numbers.
    h) find the angle between two vectors.
    i) convert complex numbers between standard and trigonometric form.
    j) multiply, divide, and take roots/powers complex numbers in trigonometric form.