Topics covered for Exam Two Math 1523

1) Knowing the basic trigonometric identities
   a) Reciprocal, quotient, Pythagorean, Cofunction, Even / Odd
   b) Double angle formulas
2) Proving an identity
3) Simplifying an expression down to a single trigonometric function
4) Simplifying an expression down to a single real number
5) Using sum / difference formulas to find the exact value [$\sin 15^{o}$]
6) Using sum / difference formulas [find sin (A + B) given cos A , tan B]
7) Using half-angle formulas to find an exact value
8) Finding the solution set for a trig. equation [exact and approximate]
   a) Linear trig. equations
   b) Solve by factoring
   c) Solve by squaring
   d) Solve by using an identity to simplify the expression
9) Using Law of Sines to find a side of a triangle
10) Using Law of Sines to find an angle of a triangle
11) Using Law of Sines to determine 2 different angles of a triangle
12) Using Law of Sines to solve an applied problem
13) Using Law of Cosines to find the side of a triangle
14) Using Law of Cosines to find the angle of a triangle
15) Using Law of Cosines to solve an applied problem
16) Find the area of a triangle using $A = \frac{1}{2} a b \sin C$
17) Find the area of a triangle using Heron's Formula

Note: No sheet of formulas will be given to the students.

Students need to memorize the identities listed on number 1 above.