MATH ANALYSIS CP   REVIEW FOR S1 FINAL

Review all sections from S1 schedule- notes, homework, quizzes, etc.

HAND WRITTEN STUDY GUIDE TO USE ON TEST (no worked out problems, formulas and unit circle ok)
CAN YOU…

TRIG FUNCTIONS
- Convert: radians ↔ degrees, polar ↔ rectangular (points, equations, complex numbers, etc.), DMS ↔ DD?
- Find reference angles and co-terminal angles, given an angle in standard position?
- Find the values of the six trig functions given:
  An angle & quadrant or another function, or given a point on the terminal side of an angle?
- Find the exact values of the six trig functions for all quadrantal angles?
- Graph each of the six trig functions as well as transformations of the parent graphs?
- Find the amplitude, period, phase shift, centerline and graph for each of the six trig functions?
- Write the equation of the six trig functions given the amplitude, period, phase shift, centerline or graph?
- Graph, evaluate, and find the equation and principal values of the inverse trig functions?
- Solve real world problems using a sinusoidal model?
- Identify and use reciprocal, quotient, Pythagorean, sum, difference, and double angle identities?
- Simplify/solve trig expressions/equations?
- Find numerical values of trig functions?

SOLVING TRIANGLES
- Solve right triangles (using right triangle trig) and non-right triangles (Law of Sines/Cosines)?
- Determine how many solutions a triangle has and then find all solutions?
- Find the area of any triangle?
- Solve real world problems using right triangle trig or the law of sines or the law of cosines?

VECTORS
- Find ordered pairs and unit vector expressions to represent vectors?
- Find equal, opposite, and parallel vectors?
- Find the amplitude and magnitude of two and three dimensional vectors?
- Find the sum or difference (graphically and algebraically) and the inner (dot) and cross products of two vectors?
- Determine whether two vectors are perpendicular?
- Solve problems using vectors and trigonometry?

POLAR GRAPHS & COMPLEX NUMBERS
- Graph polar points and simple polar equations?
- Write the polar form of rectangular equations?
- Perform operations with complex numbers (polar & rectangular): add, subtract, multiply, divide, powers, roots (using DeMoivre's theorem)?
  - HAVE YOU used the online resources like Self-Check Quizzes at amc.glencoe.com?
  - HAVE YOU reviewed your class notes?
  - HAVE YOU tried the review problems at the end of each chapter?
  - HAVE YOU made your study guide (handwritten) to use on the Final?