## MATH 140 Exam IV (5.1 - 6.4) Review

- 1. Know how to determine if a function is one-to-one and how to find the inverse of a function.
- 2. Know how to find the domain and range of f and its inverse  $f^{-1}$ .
- 3. Know how to graph exponential functions and how to solve problems involving exponential functions.
- 4. Know how to graph logarithmic functions and how to solve problems involving logarithmic functions.
- 5. Know how the laws of logarithms and change of base formula for logarithms.
- 6. Know how to solve problems involving compound interest.
- 7. Know the definition of angle, acute, obtuse, complementary, supplementary, coterminal and quadrantal angle
- 8. Know how to write the angle in DMS (Degrees Minutes Seconds) form.
- 9. Know how to convert angle from degree to radian and from radians to degree.
- 10. Know the right triangle and circular definitions of the trigonometric functions of an angle.
- 11. Know the Pythagorean identities, reciprocal identities and tangent and cotangent identities.
- 12. Know the definition of periodic function and the trigonometric formulas for negatives of an angle.

Example exercises: Quiz & Homework questions;

Ch. 5 Test, #1-22;

Ch. 5 Review, #1-62

Ch. 6 Review, #1-29