Math1220 Midterm 1 Review Problems Kelly MacArthur

Chapter 6 Review (pg 380-381) Concepts Test Problems #1, 2, 3, 6-14 all, 16, 17-19 all, 21, 26, 27, 32, 34, 40, 47 Sample Test Problems #1-29 odd, 28, 30, 32, 33, 37, 38, 41

Chapter 7 Review (pg 419-421) Concepts Test Problems #1, 2, 3 Sample Test Problems #1, 3, 5, 7, 8, 18, 20

The exam covers sections 6.1-6.5, 6.8, 6.9, 7.1.

<u>Topics:</u>

- Inverse Functions:
 - Proving that a function indeed has an inverse (even if we can't find it)
 - Finding the slope of the inverse curve for a given function, after you've proven that function has an inverse
- Differentiation & Integration of these functions (including product, chain, quotient rule for derivatives and u-sub for integration):
 - Log functions
 - Exponential functions
 - Inverse Trig functions
 - Hyperbolic functions & their inverses
- Limits with new limit rule (for e)
- Basic Integration Strategies (with u-substitution)