Math 30 Review for Final

Make sure you can do the following types of problems

- 1. Limits and Continuity
- 2. Take the derivative using the definition.
- 3. Use the rules to take the derivative of complex functions.
- 4. Use the sketch of a function to sketch the derivative.
- 5. Implicit differentiation.
- 6. Find the tangent line to a curve through a point on or off the graph.
- 7. Related rates.
- 8. Exponential growth.
- 9. Logarithmic differentiation.
- 10. Differentiate inverse functions.
- 11. Differentiate Inverse trig functions.
- 12. Curve sketching using limits and derivatives.
- 13. Optimization.
- 14. Find antiderivatives.
- 15. Use antiderivatives to solve problems about motion.
- 16. Find the area under a curve.
- 17. Use the Fundamental Theorem of Calculus.