MATH 141 CHECK LIST

- ☐ limits (including as $x \to \infty$ and including $\lim_{x \to 0} (\sin x)/x$ and $\lim_{x \to 0} (1 - \cos x)/x$)
- ☐ continuous functions
- ☐ derivatives (including the product and quotient rules, the power rule, trignometric functions, and higher order derivatives)
- ☐ implicit differentiation
- ☐ integrals (including substitution)
- ☐ related rates word problems
- ☐ maximum and minimum word problems
- ☐ graphing (critical points, local maximum and minimum values, concavity, inflection points)
- ☐ equations of tangent lines
- ☐ area under a curve or between two curves
- ☐ volumes of solids (using disks or shells)
- ☐ chain rule
- ☐ fundamental theorem of Calculus
- ☐ speed, velocity, and acceleration
- ☐ differential equations