Review for Exam 2

Exam covers 5.3, 5.4, 6.1-6.4, 7.1-7.6. You should know:

Using $f''$ to find concavity, inflection points

Sketch graphs using $f'$ and $f''$

Second derivative test to determine relative extrema

Find absolute extrema; including extrema word problems

Implicit differentiation; and use to solve related rates word problems

Antiderivatives; including using $u$-substitutions

Use antiderivatives to solve motion problems

Approximate Definite integrals using Riemann sums

Definite integrals using the Fundamental Theorem of Calculus

Use integrals to calculate areas

Don’t forget your Webwork problems.