Students should be able to do the following things by the end of each respective unit. Additions may be made as the term progresses.

Curve Sketching

- 1. Sketch the graph of a given function, indicating its domain, intercepts, and asymptotes; intervals of increase/decrease and extrema; and intervals of concavity and inflection points.
- 2. Come up with the graph of, and an algebraic expression for, a (possibly piecewise) function, given any combination of the following: domain, intercepts, asymptotes, intervals of increase/decrease, extrema, intervals of concavity, and inflection points.
- 3. Define what it means for a function to be 'even' or 'odd'.
- 4. Identify a given function as even or odd. Give examples of even and odd functions.