Practice Problems

These problems are not to be handed in, but try them first; also try the even problems if you need more practice.

- From §5-1 (pages 278–283): 1–8, 27–35 odd, 79–85 odd;
- From §5-4 (pages 319–323): 1, 29–43 odd (use a graphing calculator if you like but calculate the window size first and make sure that all intercepts, local extrema, and asymptotes appear).

The answers to these should be in the back of your textbook.

Due Problems

These problems are due November 1 Thursday.

For each of the following functions or equations, draw a graph. (Please make it neat and labelled; consider using graph paper.) Label with coordinates every intercept and every local extremum; also mark (with a *dashed* line) every vertical or horizontal asymptote. (Feel free to use a graphing calculator to do most of the work, but make sure that your graph includes everything in the directions above.)

1 $f(x) = x^3 + 80x^2 - 2000x$

2 $y = x\sqrt{x + 100}$

3 $g(x) = \dfrac{x + 25}{x - 36}$