

**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): 27–35 odd, 79–85 odd;
- From §5-4 (pages 319–323): 29–43 odd (use a graphing calculator if you like but find local extrema first).

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

**Due Problems**

These problems are due November 8 Tuesday.

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**  $g(x) = \frac{x + 25}{x - 36}$