Name_____

Section 0251

Answer all problems. There are 10 possible points.

Let
$$f(x) = x^3 - 3x^2 - 9x + 3$$
.

- 1) (2pts) Find f'(x).
- 2) (2pts) Find the intervals in which the function is increasing or decreasing.
- 3) (2pts) Locate all points where the tangent line is horizontal.
- 4) (2pts) Find all relative extrema.
- 5) (2pts) Graph the function.