Name\_\_\_\_\_

Section 0242

Answer all problems. There are 10 possible points.

Let 
$$f(x) = 2x^3 + 9x^2 + 12x + 6$$
.

- 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.