Name
Answer all problems. There are 10 possible points.

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

1) (2pts) Find $f^{\prime}(x)$.
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.

