Math 157-Quiz 7
October 22, 2014

Name $\qquad$
Score $\qquad$

Show all work to receive full credit. Supply explanations when necessary.

1. (6 points) Let $f(x)=x^{3}-9 x^{2}+15 x+3$. Find the critical numbers. Then find open intervals on which $f$ is increasing/decreasing and identify all relative extreme values.
2. (4 points) Sketch the graph of a continuous function that has exactly three critical points. One of the critical points should be a local maximum, one should be a local minimum, and one should be neither.
