## Math 157 - Quiz 7

October 22, 2014

Name \_

Score \_\_\_\_\_

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

1. (6 points) Let  $f(x) = x^3 - 9x^2 + 15x + 3$ . 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.