Math 241 Fall 2017 Dr. Harron
Classwork 8 Name: _____

Show all work and circle/box your final answer. All answers must be simplified unless stated otherwise. If you finish early, you may leave with my approval.

1. (*0 points*) Find all values of c that satisfy the conclusion of the mean value theorem for the function $f(x) = x^2 - 5x + 4$ on the interval $[1, 4]$

2. (*0 points*) Find the function with the given derivative whose graph passes through the point P: $f'(x) = 2x - 1$, $P(0, 0)$

3. (*0 points*) Find the relative extrema of $f(x) = x^4 - 4x^3$ and the open intervals in which the graph is concave up and down.