

Name _____

Section 0251

Answer all problems. There are 10 possible points.

$$\text{Let } f(x) = 3x^3 - 36x + 7$$

1) (2pts) Find $f''(x)$

2) (2pts) Find all relative extrema

3) (2pts) Find all points of inflection

4) (2pts) Find the largest open intervals where f is concave up or concave down

5) (2pts) Use the second derivative test and problem 4 to classify the relative extrema as either maximums or minimums