Answer all problems. There are 10 possible points.
Let $f(x)=2 x^{3}-24 x+2$

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