QUIZ 7

- Show all your work and indicate your final answer clearly. You will be graded not merely on the final answer, but also on the work leading up to it.

1. (3 points) Find the absolute minimum and maximum values of $f(x) = 2x^3 + 3x^2 - 12x - 5$ on $[-3, 3]$.

2. (3 points) Find the critical points of $f(x) = x^{2/3}(x-2)^2$.

3. (4 points) Let $f(x) = x^2 - 1$.
   (a) Does $f(x)$ satisfy the hypotheses of the Mean Value Theorem on the interval $[-2, 2]$?
   (b) Find all numbers $c \in [-2, 2]$ such that $f'(c) = \frac{f(2) - f(-2)}{4}$.