PRACTICE QUIZ 18

ADRIAN PĂCURAR

Time: 10 min
Time to beat: ? min

Problem 1. Find the critical points of $f(x) = x^4 + \frac{20}{3}x^3 - 12x^2$.

Problem 2. Find the critical points of $f(x) = x + \frac{2}{3}\sqrt{3}\cos x$ in the interval $[0, \pi]$.

Problem 3. Find the maximum and minimum value of $f(x) = x^3 + \frac{15}{2}x^2 + 3$ on $[-7, 2]$.

Problem 4. Let $f(x) = x^3 - 4x^2 - 4x + 2$. Find all numbers $c \in (5, 10)$ that satisfy the conclusion of the Mean Value Theorem.