MA 137 Worksheet #19

Section 5.1
10/20/20

1. Find the extrema (=absolute maximum and absolute minimum values) of $f(x) = \dfrac{x^2 - 9}{x^2 + 9}$ on the interval $[-9, 9]$.

2. Find the extrema (=absolute maximum and absolute minimum values) of $f(x) = 2x - 3\ln x$ on the interval $[1, 5]$.

3. The value of c that satisfies the conclusion of the Mean Value Theorem on the interval $[0, 4]$ for the function $f(x) = \dfrac{2}{3}x^3 - 6x$ is _____.

4. Does the function $f(x) = x^{2/3}$ on $[-8, 8]$ satisfy the conditions of the Mean Value Theorem? If not, explain why.