1. Find the extrema (=absolute maximum and absolute minimum values) of \( f(x) = \frac{x^2 - 9}{x^2 + 9} \) 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 \( f(x) = \frac{2}{3}x^3 - 6x \) 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.