Example 2: The quantity (in mg/L) of a drug being absorded in the bloodstream over time x measured in hours, is modeled by the function

$$f(x) = e^{-x} - e^{-4x}$$

At what time x for $0.1 \leq x \leq 5.8$ does the patient's bloodstream have the highest quantity of the drug? And the lowest?

Example 3: Find the absolute/global extreme points of $h(x) = x^{2/3}(x-2)^2$ on the interval $[-1, 2.2]$.

Bonus: Use its 1st and 2nd derivatives to sketch the graph of $h(x) = x^{2/3}(x-2)^2$.