Video Lesson Quiz 10

1. Find and classify the critical numbers as local max, min, or neither for the function: \( f(x) = 2x^3 - 18x \).

2. Find the EXACT intervals of increasing, concave up, and local maximum points for the function:

\[ f(x) = x^3 - 7x + 3 \]

increasing ______________________________

concave up:_____________________________

local maximum points:____________________

3. Sketch the graph of \( f(x) = x - 2 \sin x \) on the interval \([0, 2\pi]\) showing intervals of increasing, decreasing, concave up, and concave down.