PRACTICE QUIZ 9

ADRIAN PĂCURAR

Time: 10 min
Time to beat: 3 min

Problem 1. Find the points of discontinuity of the piecewise function

$$f(x) = \begin{cases} \sin(x) & x < 0 \\ x & x \geq 0 \end{cases}$$

Problem 2. Identify the points of discontinuity and their type for $f(x) = \frac{x^4-1}{x^2-1}$.

Problem 3. Using the limit definition, find the derivative of $f(x) = x^3$.

Problem 4. Using the limit definition, find the derivative of $f(x) = \frac{1}{x}$.