Math 108
Spring 2024
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Quiz Five

Show all your work

Problem 1: Let the derivative of f be defined by $f'(x) = (2x - 3)(x + 1)^2$.

    a. Draw f'.

    b. List all intervals where the original function f is DECREASING.

    c. List all inflection points of f.

    d. List all intervals where the graph of f is concave UP.

Score: /5

Problem 2: Draw the following function including all important features like local extrema, inflection point(s), and asymptotic behaviour. Remember to take appropriate limits to support your claim.

$$y = \frac{x^3}{9 - x^2}$$

Score: /5