

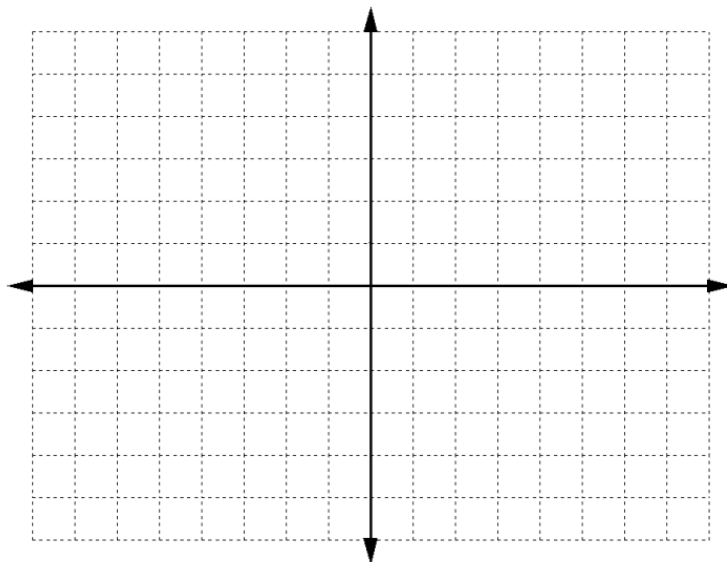
Calculus Worksheet

Your Name: _____

Given the function f ,

- Sketch its graph.
- Compute and sketch its derivative.
- Compute and label f with (x,y) of all critical points, relative extrema, and absolute extrema.
- Given that f is continuous, use the Intermediate Value Theorem to prove that f has a root on its domain.
- Find all values of x that satisfy the conclusion of the Mean Value Theorem on the interval $[-4,3]$

$$f(x) = x - \frac{x^2}{5} + \ln(8x^2 + 1), -4 \leq x \leq 8$$



$$f'(x) =$$

