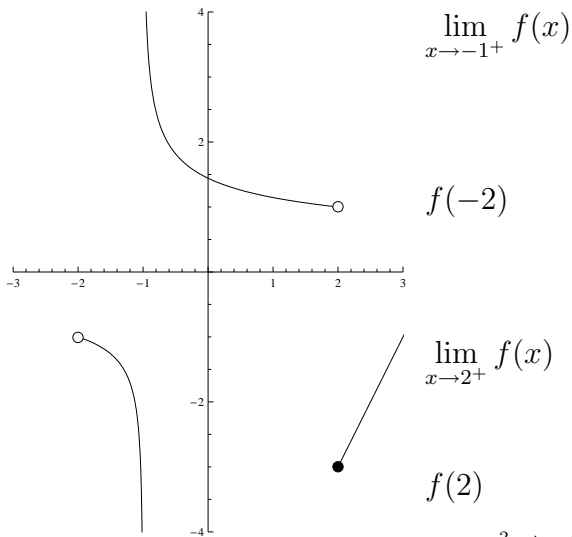


1. (8 points) For the plot of $f(x)$ shown below, evaluate the given quantities, or, if they cannot be evaluated, explain why.



2. (4 points) Calculate $\lim_{x \rightarrow 3} \frac{x^2 - 4x + 3}{x - 3}$.

3. (8 points) Using the difference quotient, find the equation of the tangent line to the function $f(x) = 2x^2 - 3$ at $(2, 5)$.

4. (2 point bonus) If $f(x) = \sqrt{x}$, use the difference quotient to calculate $f'(9)$, on the back of the paper if necessary.