

Provide a clear and organized presentation. Show all of your work, completely simplify all answers, and give exact values only. Use our definition of the derivative (i.e., the limit of a difference quotient) to determine $f'(a)$ if $f(x) = \frac{x}{x+5}$. Then, use $f'(a)$ to determine $f'(1)$ and $f'(-2)$. Give a meaningful interpretation of these two values.