Drill Handout Sections 3.1 and 3.2 September 19, 2019 Name:_____

(1) Find the slope of the line tangent to the graph of $f(x) = \frac{1}{2x-3}$ at $P(2,1)$. Determine the equation of the tangent line at P.

(2) Find the slope of the line tangent to the graph of $g(x) = \sqrt{3x+1}$ at $P(1,2)$. Determine the equation of the tangent line at P.

(3) Find the derivative function h' for the function $h(x) = \frac{1}{\sqrt{x+1}}$.

(4) Find the derivative function f' for the function $f(x) = \frac{x}{x+1}$.