1. Use a limit definition of the derivative to find the derivative of the function $f(x)=\frac{1}{x}$.
2. Use a limit definition of the derivative to find the derivative of the function $f(x)=5-3 x^{2}$.
3. Use a limit definition of the derivative to find the derivative of the function $f(x)=5 x^{2}-2$.
4. Use a limit definition of the derivative to find the derivative of the function $f(x)=\sqrt{x}$.
