% 1. Relativistic Electron Degeneracy Pressure Equation

P \propto \left[ x \left( 2x^2 - 3 \right) \sqrt{1 + x^2} + 3 \ln \left( x + \sqrt{1 + x^2} \right) \right]

% 2. The f\_prime(x) Function

f'(x) = \left( 6x^2 - 3 \right)\sqrt{1 + x^2} + \frac{x^2(2x^2 - 3)}{\sqrt{1 + x^2}} + \frac{3}{x + \sqrt{1 + x^2}}\left( 1 + \frac{x}{\sqrt{1 + x^2}} \right)



