

```
1 % Ian Woodbury
2 % 9/19/21
3 % ECE 202 Fall 2021 MATLAB Exercise M4
4 % Plotting different graphs in terms of x(distance in meters) and t
5 % (time in s or ms) Each graph labeled in their own section
6
7 clear
8
9 % ----- Truncated Power Series -----
10
11 t = linspace(0, 6, 400); % sets x axis as time as t in seconds,
12 % with 400 points t is plotted on
13 f = 1 + t/2 - (t.^2)/3; % function of f(t) for each point given
14 plot(t, f, 'LineWidth', 3) % plots function f in terms of t
15 grid on % creates grid for graph, more legible
16 set(gca, 'FontSize', 14) % sets the font size for axis values
17 xlabel('t (s)', 'FontSize', 20); % labels x axis as time, w/ units
18 ylabel('f(t)', 'FontSize', 20); % labels y axis as function, f(t)
19 title("ECE 202 MATLAB Exercise M4 Part (a): \newline Truncated Power" ...
20 + " Series", 'FontSize', 24)
21 % creates the title for the graph, M4, and the given graph
22
```