MATLAB Assignment 8

Spring 2019, Section B

1. State of the Space

2. Girl look at that Bode! A continuous time system is characterized by the following equation:

$$f = t^5 e^{2t} sin(5t) + t^3 e^3 tcos(4t) + tcos(10t)$$

a. Take the Laplace Transform of the above equation. (Hint: Use the symbolic toolbox!)

b. Use ***numden*** and ***coeffs*** to extract the coefficients from the Laplace transform. Use ***double*** to convert them to numeric form.

c. Make a bode plot for the equation you obtained above. Turn the grid on. Why does the grid look the way it does?