Control Systems

Arun Sakthi Anand
EE19BTECH11009
Dept. of Electrical Engg.,
IIT Hyderabad.

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Transfer Function

A Transfer Function is the ratio of the output of a system to the input of a system, in the Laplace domain considering its initial conditions and equilibrium point to be zero.

Question

12. Use MATLAB to generate the transfer function: [Section: 2.3]

MATLAB ML

$$G(s) = \frac{5(s+15)(s+26)(s+72)}{s(s+55)(s^2+5s+30)(s+56)(s^2+27s+52)}$$

in the following ways:

a. the ratio of factors;

b. the ratio of polynomials.

Ratio of factors

This code helps to display the transfer function as ratio of factors click here.

Ratio of polynomials

This code helps to multiply the terms and display them as ratio of polynomials.
click here.