

CONTROL LAB 5

1) For the parabolic input, step input and ramp input, write the m-file which calculates steady state errors and error constants of a, b and c systems. (Parabolic input:t^2/2)

a)
$$G(s) = \frac{1}{(s+1)(3s+1)}$$

b)
$$G(s) = \frac{(s+1)(s+7)}{(s+2)(s+5))}$$

c)
$$G(s) = \frac{(s+5)(s+7)}{s^2(s+1)(s+4)}$$

2) For given control system (For each of above a, b and c systems), apply step, ramp, parabolic inputs and observe the steady state error.

