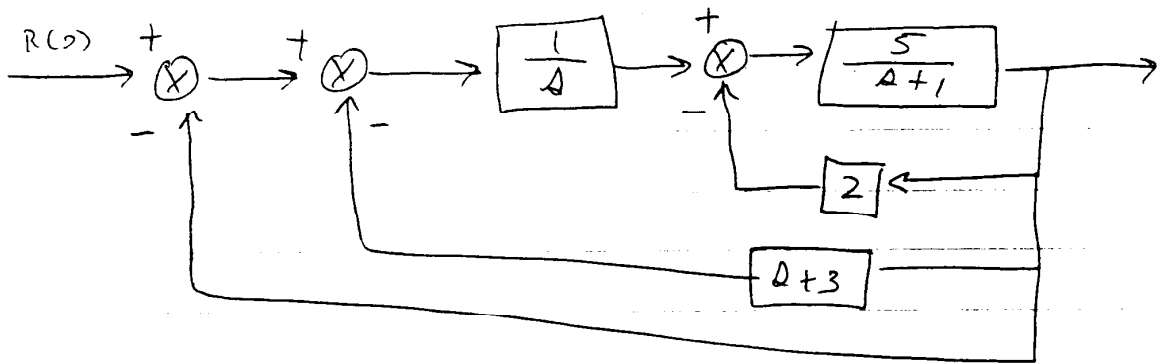


7-1 For the unity FB system with

$$G(s) = \frac{500(s+7)(s+2)(s+9)}{s^2(s+27)(s^2+2s+10)}$$

find the SSE for $25u(t)$, $37tu(t)$, $50t^2u(t)$

7-3 What is the SSE for an input of $15u(t)$?



7-4 What is the SSE for $35u(t)$, $70tu(t)$ and $80t^2u(t)$ for a unity FB system with

$$G(s) = \frac{200}{(s+10)(s^2+4s+5)}$$

7-9 For the Unity FB system with

$$G(s) = \frac{1250}{s(s+50)}$$

- a) Find %OS for a step input
- b) Find T_s for a step input
- c) What is the SSE due to $5u(t)$?
- d) $5tu(t)$?
- e) $5t^2u(t)$?

7-14 Find the system type:

