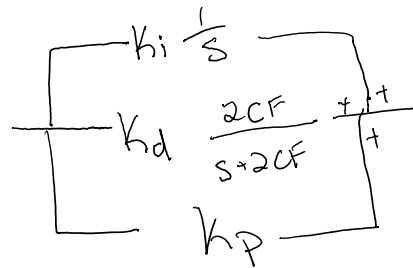
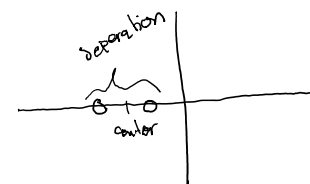


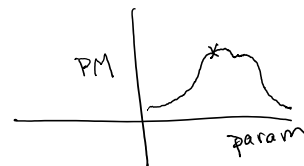
November 30, 2022 3:06 PM




$C: Z < 0$
 $K_m > 0$



Complex $r \pm im$ 2-param





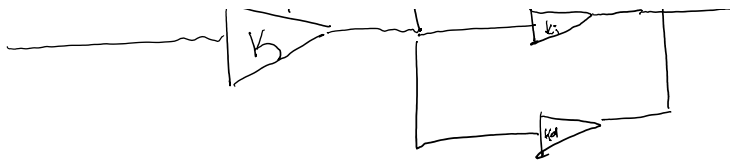
Zeros = $[x \ x]$
Poles = $[0 \ x]$

$\left. \begin{array}{l} \text{Zeros} = [x \ x] \\ \text{Poles} = [0 \ x] \end{array} \right\} [k \ k_p \ k_i \ k_d]$

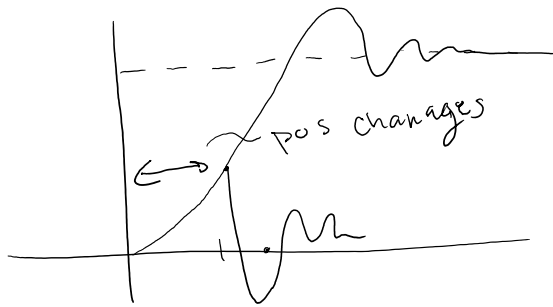
k_i need this k_d ✓ done

A block diagram of a control system. An input signal enters a block labeled K_D . The output of this block splits into two paths. The first path goes through a block labeled K_F and then to the output. The second path goes through a block labeled K_I and then to the output. The output of the K_I block is also fed back to the input of the K_D block.

Elec 341 Page 1

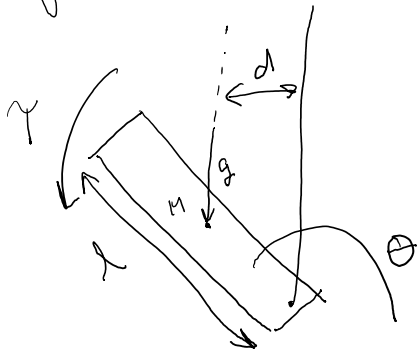


$$k_i = 1$$



Path Planning

- Best thing for saturation is to avoid it altogether



$$\tau = Mg d$$

$$d = \frac{l}{2} \cos \theta$$

Stiction = static friction