

Fall 2010

I): Response sketching:

i) Sketch the response of $G(s) = \frac{(s+2)}{(s^2+0.8s+1)(s+25)}$ to a step input of size 2. Indicate settling time, final value and peak value on the graph.

ii) Sketch the response of $G(s) = \frac{3}{s+10}$ to a unit step input, indicating settling time and final value on the graph.

II) Transfer functions and I/O diff. eq:

i) Find the transfer function from voltage to wheel velocity:

