

Name: _____

Matriculation Number: _____

So far, we have learnt that stability of the closed loop can be checked by finding the gain-crossover frequency (ω_{cg}) and phase-crossover frequency (ω_{cp}) only. Using these two parameters only, check closed loop stability for the following three loop transfer functions.

$$L_1(s) = \frac{100}{s(s+2)}, \quad L_2(s) = \frac{100}{s(s^2 + 6s + 25)}, \quad L_3(s) = \frac{200}{s(s^2 + 6s + 25)}$$