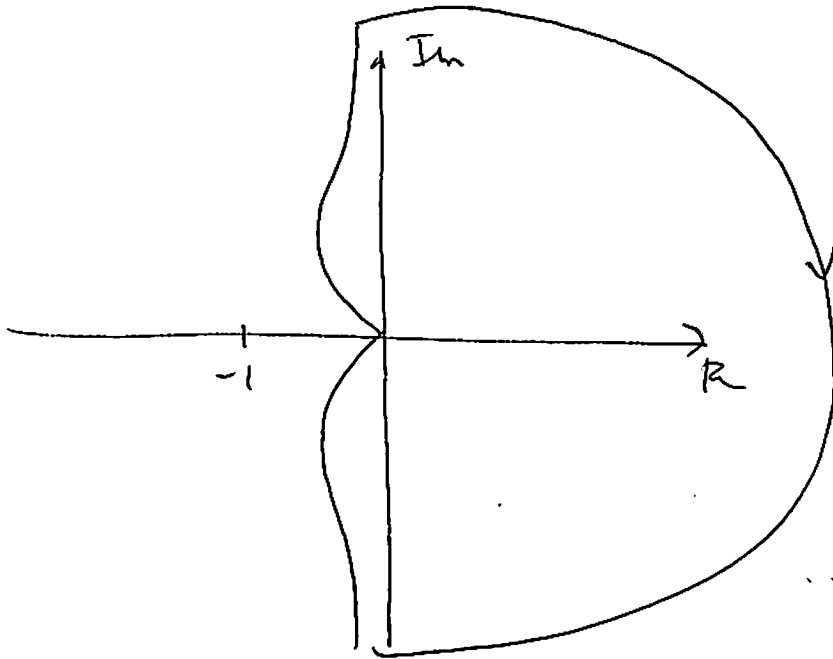


(b) $GM = \infty$ (considering phase plot approaches -180 asymptotically)

or $GM = +40(.55) = +22 \text{ dB}$ (considering $\angle G(j\omega) = -180$ @ 2.5 rad/s)

Nyquist plot



(c) crossover freq : 0.71

$$T_d(0.71) = (25^\circ) \times \frac{\pi}{180}$$

$$\Rightarrow T_d = .61$$