



 POLITECNICO DI MILANO



ESERCIZI SU

Margini di guadagno e fase, criterio di Bode

Marcello Farina

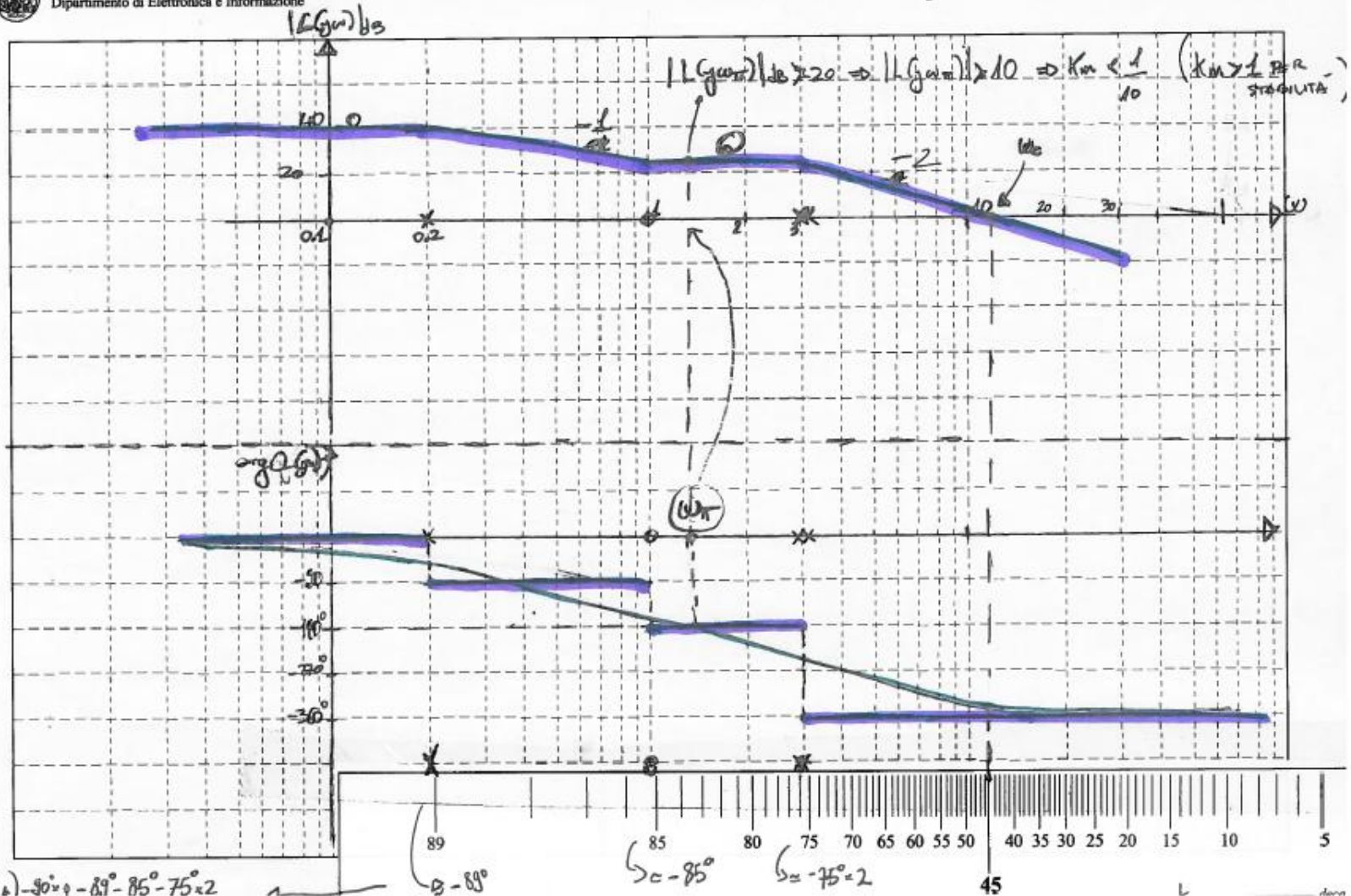


Es. 2



Politecnico di Milano
Dipartimento di Elettronica e Informazione

$$L(s) = \frac{100(1-s)}{(1+5s)(1+\frac{s}{3})^2}$$



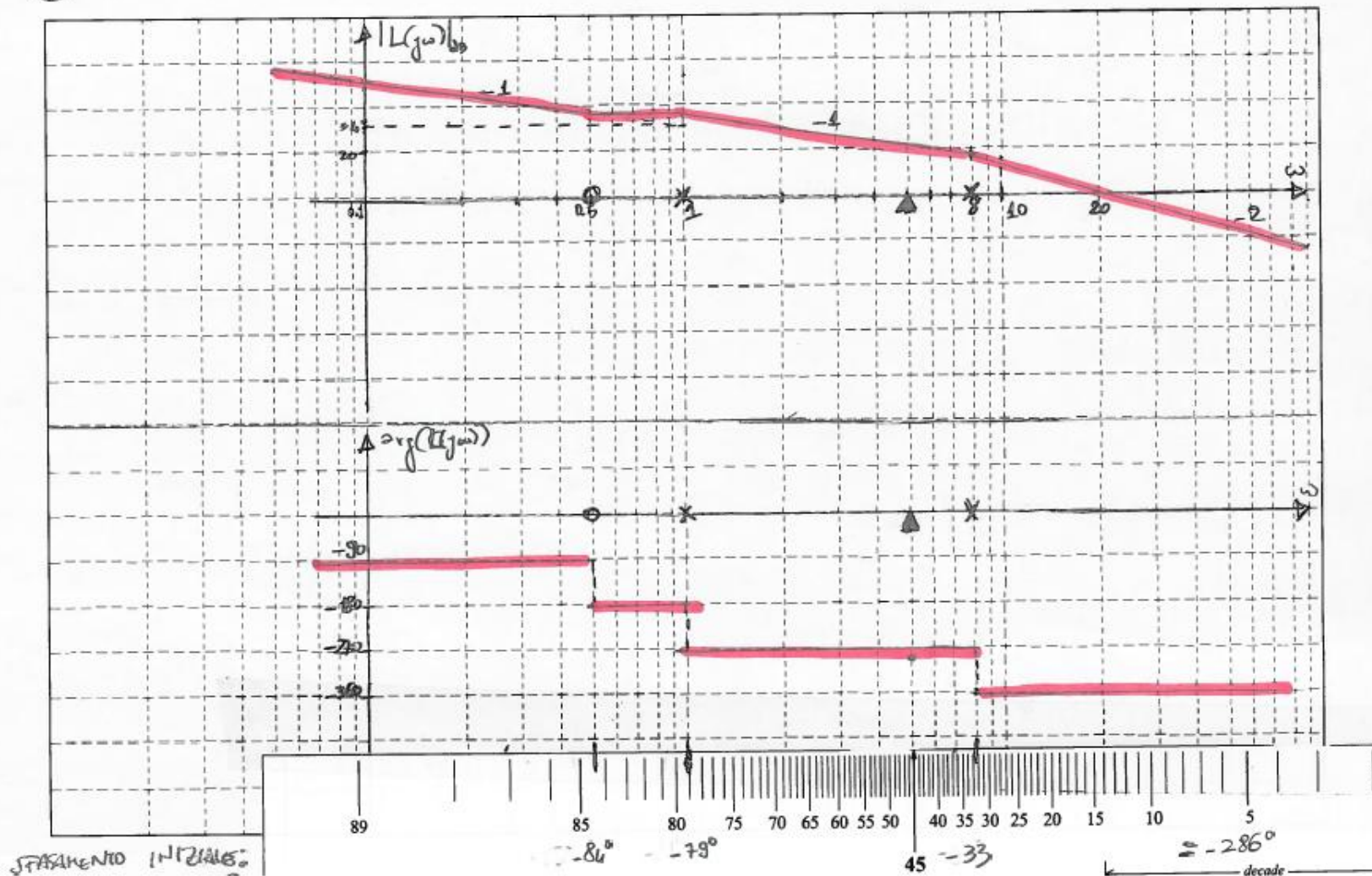


Es. 3



Politecnico di Milano
Dipartimento di Elettronica e Informazione

$$L(s) = \frac{400(1-2s)}{5s + 9s^2 + 85}$$





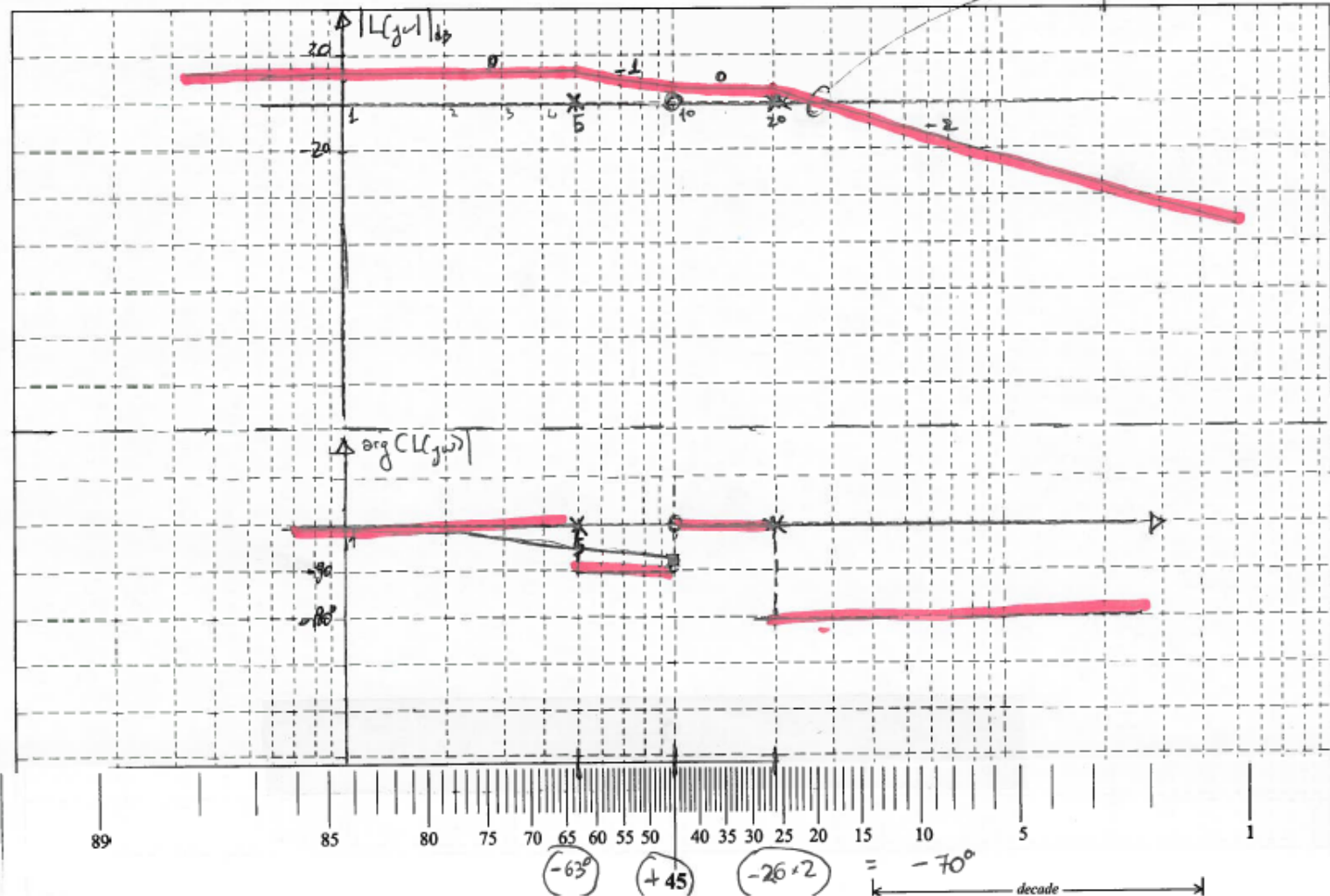
Es. 4



Politecnico di Milano
Dipartimento di Elettronica e Informazione

$$L(s) = \frac{1000(s+10)}{(s+5)(s+20)^2}$$

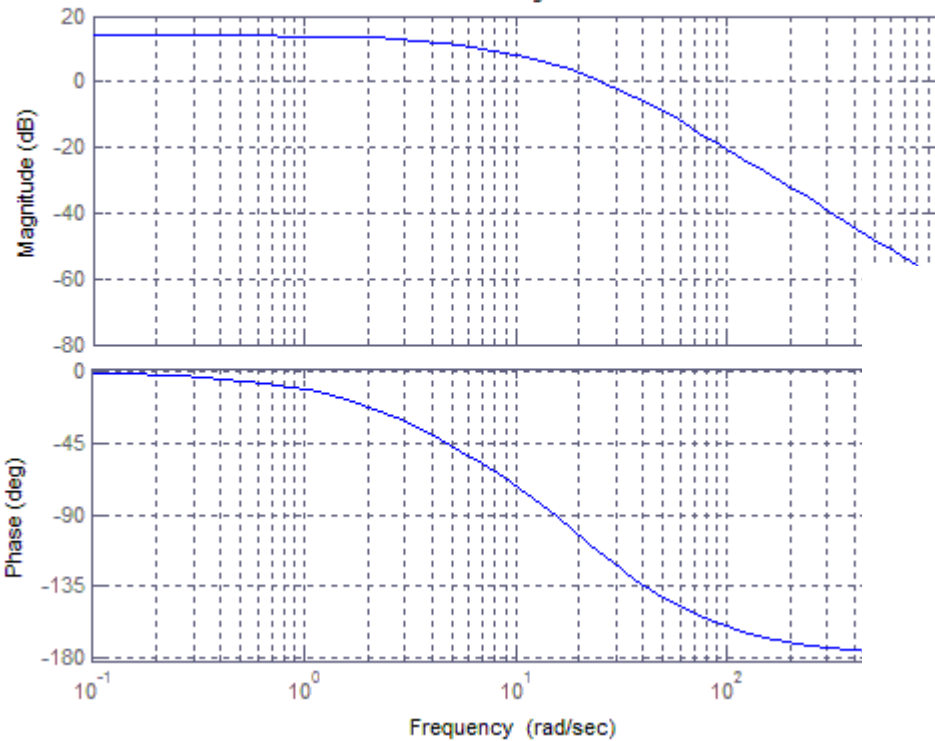
$\omega_c = 25,6 \text{ rad/s}$
 $\phi_m = 65,8^\circ$





Es. 4

Bode Diagram



Nyquist Diagram

