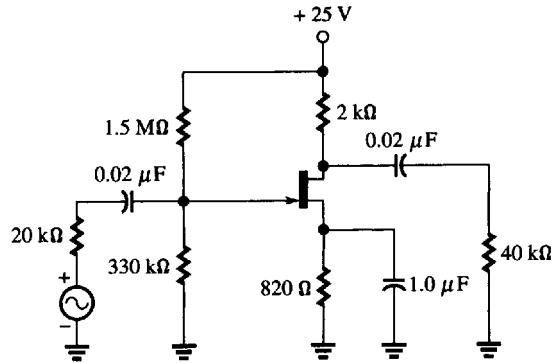


Electronics II

Problem sheet 4

Frequency analysis

P. Stallinga



$$R_i = 20 \text{ k}\Omega, R_L = 40 \text{ k}\Omega, R_{G1} = 330 \text{ k}\Omega, R_{G2} = 1.5 \text{ M}\Omega, R_D = 2 \text{ k}\Omega, R_S = 820 \Omega, \\ C_i = C_L = 20 \text{ nF}, C_S = 1 \mu\text{F}, C_{gs} = 4 \text{ pF}, C_{ds} = 0.5 \text{ pF}, C_{gd} = 1.2 \text{ pF}$$

- a) Determine the mid-frequency gain of the complete circuit.
- b) Schematically draw Bode plots of the behavior of the circuit in terms of frequency.