

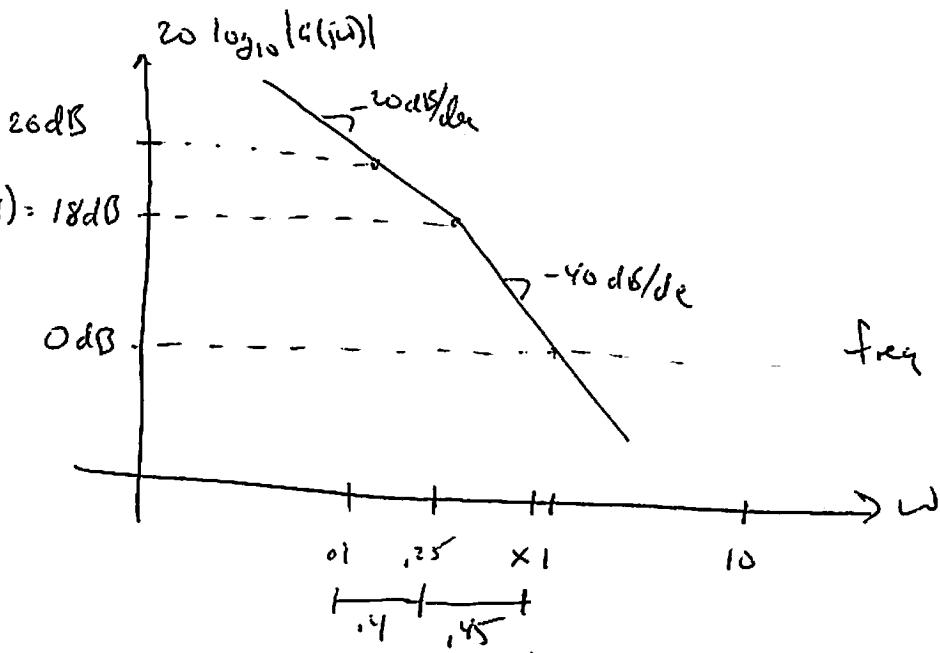
$$@) G(s) = \frac{2}{4s^2 + 1} = \frac{2}{s(4s+1)} = \frac{2}{s} \cdot \frac{1}{s+0.25}$$

$$LFT: \frac{2}{s}$$

freq	type	mag slope	phase slope
0.25	CR pole	-20 dB/dec	$-4\sqrt{5} dB/dec$

$$LFT \\ \text{mag @ } 0.1 \text{ rad/s} : \frac{2}{0.1} = 20$$

$$20 \log_{10}(2) = 20 \text{ dB}$$



$$\text{freq at crossover: } \frac{18 \text{ dB}}{40 \text{ dB/dec}} = 0.45 \text{ dec}$$

x is 0.45 dec from 0.25 or 0.85 dec from 1.

$$10^{0.45} = 7.1$$

$$\text{thus } \underline{x = 0.71} \quad (\text{or } 10^{-0.15} = 0.71)$$

