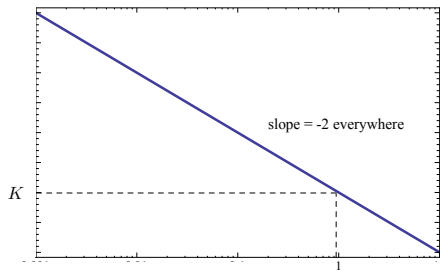


Back to Our Example: $G(s) = \frac{1}{s^2}$

Objectives (same as before):

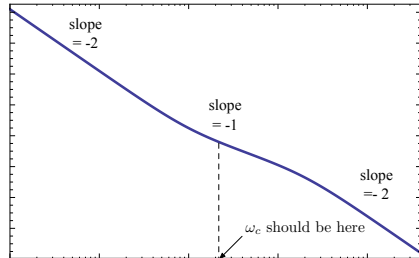
- ▶ stability
- ▶ good damping
- ▶ ω_{BW} close to 0.5

$KG(s) = \frac{K}{s^2}$ (w/o lead):



$$\frac{K}{(0.5)^2} = 1 \implies K = \frac{1}{4}$$

after adding lead:



— adding lead will increase ω_c !!