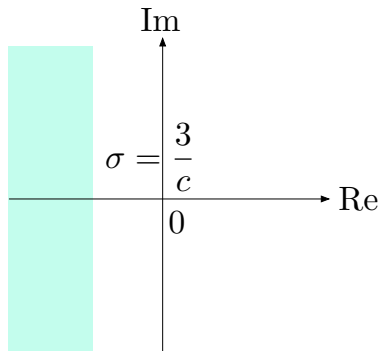


Settling Time in Frequency Domain

Suppose we want $t_s \leq c$

$$t_s \approx \frac{3}{\sigma} \leq c \quad \implies \quad \sigma \geq \frac{3}{c}$$

Want poles to be sufficiently fast (large enough magnitude of real part):



Intuition: poles far to the left \rightarrow transients decay faster \rightarrow smaller t_s