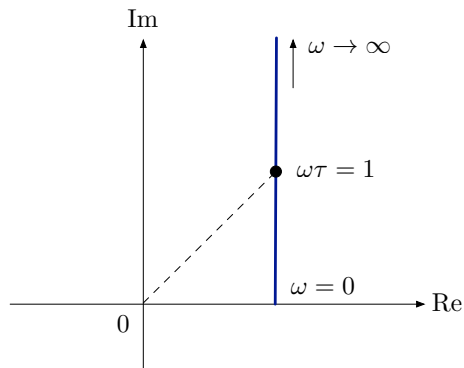


Type 2: $j\omega\tau + 1$

This is the case of a *stable real zero*.

To study $|j\omega\tau + 1|$ and $\angle(j\omega\tau + 1)$ as a function of ω , we will look at the *Nyquist plot*:



For $\omega\tau \ll 1$, $j\omega\tau + 1 \approx 1$

$\omega\tau \gg 1$, $j\omega\tau + 1 \approx j\omega\tau$

(like Type 1 with $K_0 = \tau, n = 1$)

Transition:

$$\omega\tau = 1 \iff \omega = 1/\tau$$

— this is the **breakpoint**