④ $\{z_n\}, \{w_n\}$ $z_n \neq 0$ $\{z_n\} \to 1$ (Relación 5)

$$\{w_n(z_n - 1)\} \to \lambda \in \mathbb{C} \Rightarrow \{z_n^{w_n}\} \to e^{\lambda}$$

$$z_n^{w_n} = e^{w_n \log(z_n)} = e^{w_n(z_n-1)\cdot \frac{\log(z_n)}{z_n - 1}}$$

$w_n(z_n-1) \to \lambda$ (hip.)

$\frac{\log(z_n)}{z_n-1} \to 1$ log. derv. en 1 y derivada vale 1

$\to e^{\lambda}$ //

$$\lim_{z \to 1} \frac{\log(z) - \log(1)}{z-1} = (\log(z))'\Big|_{z=1} = 1$$