Para calcular o VSWR em função da carga (ex: antena) e do gerador/transmissor (ex: cabo coaxial)

Vamos ter que usar a fórmula abaixo e consequentemente a fórmula do τ "TAU"

$$VSWR = \frac{1 + |\tau|}{1 - |\tau|}$$

$$\tau = \frac{Z_L - Z_S}{Z_L + Z_S}$$

$Z_L = Impedancia\ do\ lado\ do\ gerador\ (ex: cabo\ coaxial)$

$Z_S = Impedancia\ do\ lado\ da\ carga\ (ex: antena)$

Ex: cabo coaxial> 50 Ohm e antena> 25 Ohm	Ex: cabo coaxial> 50 Ohm e antena> 75 Ohm	Ex: cabo coaxial> 50 Ohm e antena> 100 Ohm
$\tau = \frac{50 - 25}{50 + 25} = \frac{25}{75} = \frac{1}{3}$	$\tau = \frac{50 - 75}{50 + 75} = \frac{-25}{125} = \frac{-1}{5}$	$\tau = \frac{50 - 100}{50 + 100} = \frac{-50}{150} = \frac{-1}{3}$
$\mathbf{VSWR} = \frac{1 + \left\|\frac{1}{3}\right\|}{1 - \left\|\frac{1}{3}\right\|} = \frac{\frac{4}{3}}{\frac{2}{3}} = 2$	$\mathbf{VSWR} = \frac{1 + \left\|\frac{-1}{5}\right\|}{1 - \left\|\frac{-1}{5}\right\|} =$	$\mathbf{VSWR} = \frac{1 + \left\|\frac{-1}{3}\right\|}{1 - \left\|\frac{-1}{3}\right\|} =$
	$\mathbf{VSWR} = \frac{\frac{5}{5} + \left\|-\frac{1}{5}\right\|}{\frac{5}{5} - \left\|-\frac{1}{5}\right\|} = \frac{\frac{6}{5}}{\frac{4}{5}} = \frac{6}{5} \times \frac{5}{4} = \frac{6}{4} = 1.5$	$\mathbf{VSWR} = \frac{\frac{3}{3} + \left\|-\frac{1}{3}\right\|}{\frac{3}{3} - \left\|-\frac{1}{3}\right\|} = \frac{\frac{4}{3}}{\frac{2}{3}} = \frac{4}{3} \times \frac{3}{2} = \frac{4}{2} = 2$