Electrical circuits

Kinzel	Python
`Solve[eq1, {vo, vr, ir, ic, il}]`	`def Vo(w,R,L,C):` `  return -1j*w*L/(-1j*w*L - R + R*C*L*w**2)`

`phase(Vo)`	`func = Vo(w,R,L,C)`
	`def phase(func):`
	`  return np.arctan(func.imag/func.real)`

$P_0 = \frac{\lvert V_i \rvert^2}{2R}$ where V_i is constant	`def P0(Vi,R):` `  return abs(Vi)**2/(2*R)`

$P(\omega) = \frac{\lvert I_R(\omega) \rvert^2 R}{2}$	`def Ir(w,R,L,C):`
	`  return (1j*w*C + 1/(1j*w*L)) * func`
	
	`def P(w,R,L,C):`
	`  return abs(Ir(w,R,L,C))**2*R/2`