

If
$$v(t) = 155.6\cos(2\pi 60t + 85^{\circ})V$$

and $i(t) = 565.7\cos(2\pi 60t + 15^{\circ})mA$

Find

- a) V_{RMS} and I_{RMS} phasors.
- b) Complex power phasor (include units). Draw power triangle.
- c) Apparent power (include units).
- d) Real power (include units).
- e) Reactive power (include units).
- f) Power factor (include leading or lagging).
- g) Load impedance in Ω .
- h) Model of load impedance as series RL or RC.
- i) Average power dissipated in load (include units).