Q (1) In the shown circuit, find out the followings:
(a) the total resistance ($R_t$).
(b) all currents indicated.
(c) the total power ($P_t$).

Q (2) In the shown circuit, calculate:
(a) the voltage $\Sigma$.
(b) the total current ($I_t$).
(c) the current ($I$).
(d) the total power ($P_2$).

Q (3) In the following circuit, find:
(a) the voltage ($V_x$) across the resistance 3 $\Omega$.
(b) the voltage ($V_c$) across the capacitor.

Q (4) In the shown circuit, find:
(a) the total circuit impedance ($Z_t$).
(b) the total circuit current ($I_t$).
(c) the power factor of the circuit ($PF$).
(d) the total power of the circuit ($P_t$).
(e) Draw the impedance diagram.