
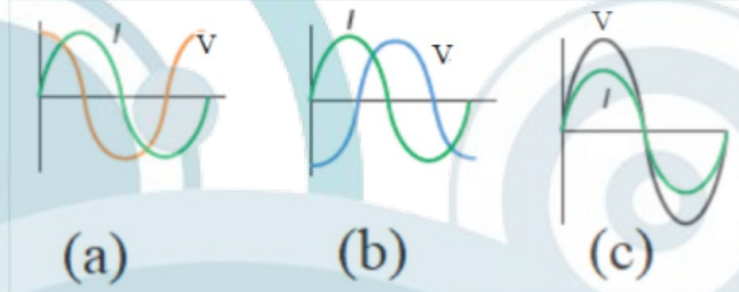


2

Which of the following plots represent the source voltage (V) and the total current (I) in a series RL circuit versus frequency? 
(2 Points)




- ☒ a
☐ b
☐ c
☐ None of the above

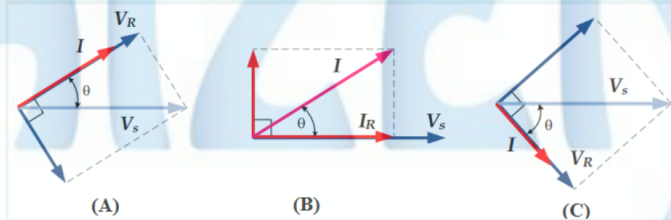
3

3

For the shown phasor diagrams, which one represents leading power factor (PF) ?

If (V_s) represents the source voltage, (I) the source current, (I_R) is the current through the resistor and (V_R) is the voltage on the resistor.


(Note that you can select more than one choice if needed, but the wrong choice will cancel the correct one.) 
(2 Points)



- ☒ A
☐ B
☐ C
☐ None of these

4

The circuit that always has negative angle for its total admittance (Y) when changing its frequency will be:

(Note that you can select more than one choice if needed, but the wrong choice will cancel the correct one.) 
(2 Points)


- ☐ None of these
- ☐ Parallel RC circuit
- ☐ Parallel RL circuit
- ☐ Series RL circuit
- ☒ Series RC circuit

EE204: Q2 (EE204_2nd semester)

- ☐ $|I| = 0.223$ and its phase = 56.6 degree
- ☐ $|I| = 0.223$ and its phase = 3.43 degree

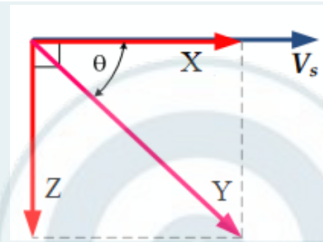
6

The circuit that always has positive reactive power (Q) when changing its frequency will be:

(Note that you can select more than one choice if needed, but the wrong choice will cancel the correct one.) 
(2 Points)

- ☐ None of these
- ☒ Series RL circuit
- ☐ Series RC circuit
- ☒ Parallel RL circuit
- ☐ Parallel RC circuit

7



A student draw a phasor diagram for a parallel RL circuit shown. The X, Y and Z represent respectively:

(Note: I is the total source current, I_R is the resistor current and I_L is the inductor current)
(1 Point)

- ☐ I_L , I_R and I
- ☐ I_R , I_L and I
- ☒ I_R , I and I_L
- ☐ I_L , I and I_R