

NAME \_\_\_\_\_

1. The equation for capacitive reactance is \_\_\_\_\_?

a.  $\frac{1}{2\pi f L}$

b.  $2\pi f C$

c.  $\frac{1}{2\pi f C}$

d.  $2\pi f L$

2. The equation for inductive reactance is \_\_\_\_\_?

a.  $\frac{1}{2\pi f L}$

b.  $2\pi f C$

c.  $\frac{1}{2\pi f C}$

d.  $2\pi f L$

3. As frequency increases capacitive reactance \_\_\_\_\_?

a. Stays the same

b. Increases

c. Decreases

d. Goes negative

4. As frequency increases inductive reactance \_\_\_\_\_?

a. Stays the same

b. Increases

c. Decreases

d. Goes negative

5. Reactance lies on which axis of the complex plane?

a. X

b. Y

c. Z

d. Imaginary

e. B and D

6. Capacitive reactance on the complex plane is?

a. Positive

b. Negative

7. Inductive reactance on the complex plane is?

- a. Positive
- b. Negative

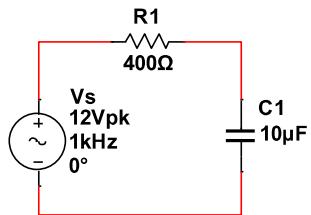
8.  $250 - j440$  in polar notation is?

- a.  $-506\angle -60$
- b.  $506\angle -60$
- c.  $-506\angle 60$
- d.  $506\angle 60$

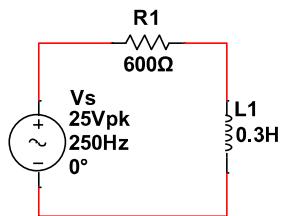
9.  $25\angle 40$  in rectangular form is?

- a.  $-19.2 + j16.1$
- b.  $19.2 + j16.1$
- c.  $19.2 - j16.1$
- d.  $-19.2 - j16.1$

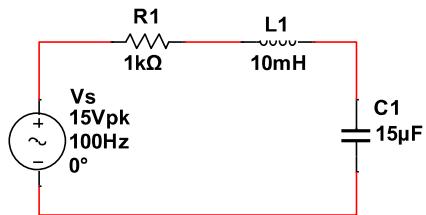
10. Find  $Z_T$ ,  $I_T$  and phase angle between  $V_s$  and  $I_T$



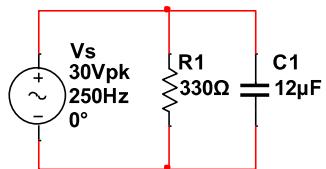
11. Find  $Z_T$ ,  $I_T$  and phase angle between  $V_s$  and  $I_T$



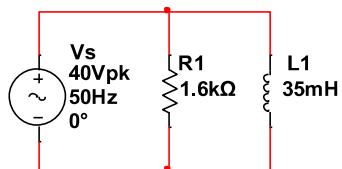
12. Find  $Z_T$ ,  $I_T$  and phase angle between  $V_s$  and  $I_T$



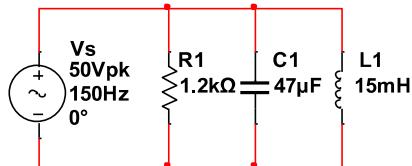
13. Find  $Z_T$ ,  $I_T$  and phase angle between  $V_s$  and  $I_T$



14. Find  $Z_T$ ,  $I_T$  and phase angle between  $V_s$  and  $I_T$



15. Find  $Z_T$ ,  $I_T$  and phase angle between  $V_s$  and  $I_T$



16. Find  $Z_T$ ,  $I_T$  and phase angle between  $V_s$  and  $I_T$

