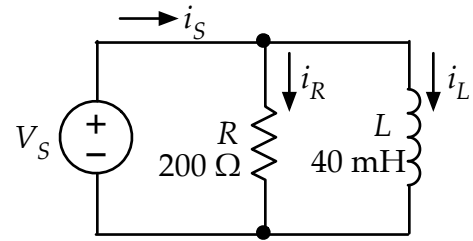


In the circuit shown at right, the voltage source is sinusoidal with

$$V_S(t) = V_m \cos(\omega t),$$

where $V_m = 10$ V and $\omega = 5000$ rad/s. Write the expression for the total current flowing through the source.

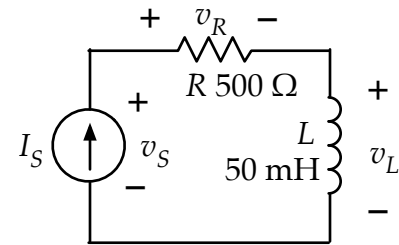


$i_S =$ _____

In the circuit shown at right, the current source is sinusoidal with

$$I_S(t) = I_m \sin(\omega t),$$

where $I_m = 5$ mA and $\omega = 10,000$ rad/s. Write the expression for the total voltage across the source.



$v_S =$ _____