

Sinusoidal signals

After completing this section, students should be able to do the following.

- Describe the basic properties of sinusoidal functions.
- Compare and contrast phase and time-delay.
- Recognize leading and lagging signals.
- Explain why a signal is leading or lagging.
- Remember eLi the iCe man and CIVIC mnemonics.
- Explain how a signal is different at the beginning and end of a transmission line.
- Derive equation of a wave on a transmission line by considering the finite propagation speed of electric signals.
- Determine whether the transmission-line theory should be used based on line length and signal frequency.