

9-7 Self Evaluation Test

1. Name four common conductor forms and state one practical application for each.
2. What are three important factors to be considered when selecting the type of wire insulation to be used for a particular job?
3. What is the relationship between the AWG number and the diameter of the wire?
4. State the AWG size of copper wire most commonly used for each of the following house circuits:
 - (a) dryer circuit
 - (b) range circuit
 - (c) electrical outlets and lighting circuits
 - (d) electric water heater circuit.
5. (a) Define the term conductor ampacity.
(b) List four factors that determine the ampacity of a conductor.
6. State the effect of each of the following on the resistance value of a circuit conductor:
 - (a) increasing the length of the conductor,
 - (b) decreasing the diameter of the conductor,
 - (c) increasing the operating temperature of the conductor,
 - (d) using an aluminum conductor in place of copper.
7. (a) What is meant by the term *line voltage drop*?
(b) Under what condition is the line voltage drop considered to be zero?