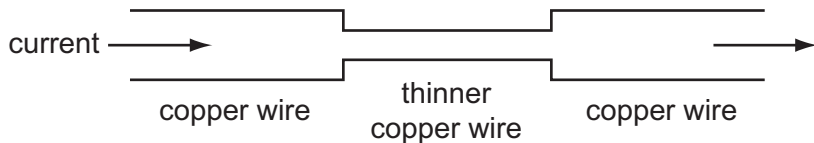


- 33** An electric current is passed from a thick copper wire through a section of thinner copper wire before entering a second thick copper wire as shown.



Which statement about the current and the speed of electrons in the wires is correct?

- A** The current and the speed of the electrons in the thinner wire are both less than in the thicker copper wires.
- B** The current and the speed of the electrons is the same in all the wires.
- C** The current is the same in all the wires but the speed of the electrons in the thinner wire is greater than in the thicker wires.
- D** The current is the same in all the wires but the speed of the electrons in the thinner wire is less than in the thicker wire.

- 24** An electrical device of fixed resistance $20\ \Omega$ is connected in series with a variable resistor and a