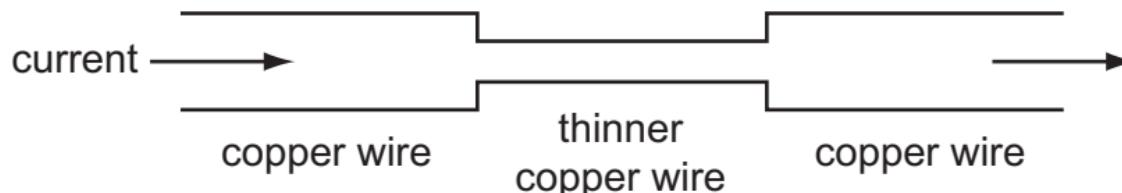


- 33 An electric current is passed from a thick copper wire through a section of thinner copper wire before entering a second thick copper wire as shown.



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.

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