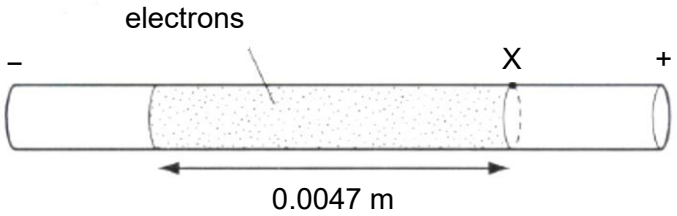
20 Copper has 8.5×10^{28} conduction electrons per cubic metre. A piece of copper wire has an area of cross-section 3.2×10^{-7} m^2.



When a potential difference is applied to the wire, the electrons within a cylinder of length of 0.0047 m all pass point X in 60 s.

What is the current in the wire?

A 0.34 A

B 2.0 A

C 20 A

D 340 A