32 The potential difference across a metal wire is kept constant. The length l and the diameter d of the wire are both varied. The type of metal is kept the same.

How is the current in the wire related to l and d?

A It is directly proportional to l and inversely proportional to d.

B It is directly proportional to l and inversely proportional to d^2.

C It is inversely proportional to l and directly proportional to d.

D It is inversely proportional to l and directly proportional to d^2.