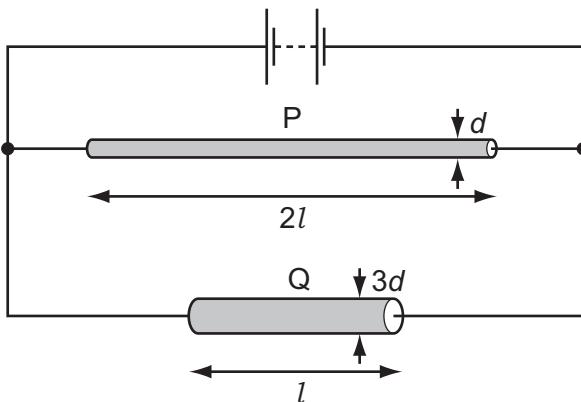


- 35 Two wires P and Q made of the same material are connected to the same electrical supply. P has twice the length of Q and one-third of the diameter of Q, as shown in the diagram.



What is the ratio $\frac{\text{current in P}}{\text{current in Q}}$?

A $\frac{2}{3}$

B $\frac{2}{9}$

C $\frac{1}{6}$

D $\frac{1}{18}$

Space for working