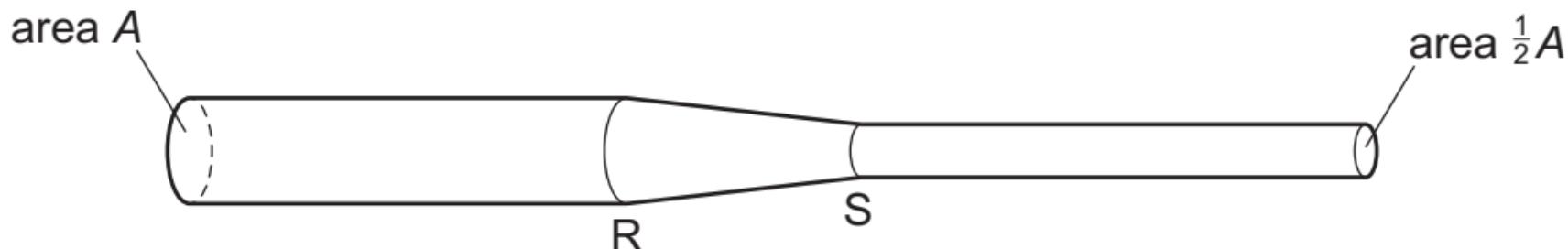


33 A length of wire is connected into a circuit.



The area of the cross-section of the wire changes from A at R to $\frac{1}{2}A$ at S.

There is a constant current in the wire. Charge Q passes R in time t .

What is the charge passing point S in the same time t ?

A $\frac{1}{2} Q$

B Q

C $Q\sqrt{2}$

D $2Q$