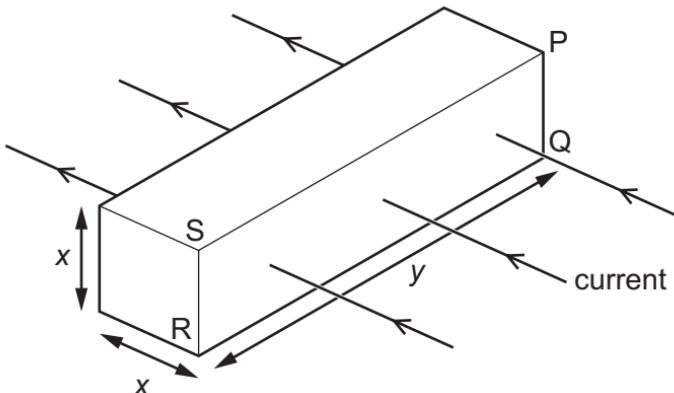


- 31 The diagram shows the direction of the current in a metal block. The charge carriers enter the block through the face PQRS and leave the block through the opposite face.



The number density of charge carriers is n . Each charge carrier has charge e . The average drift speed of the charge carriers is v .

Which expression gives the current in the block?

A $envx^2$

B $envxy$

C $envx^3y^2$

D $envx^4y$