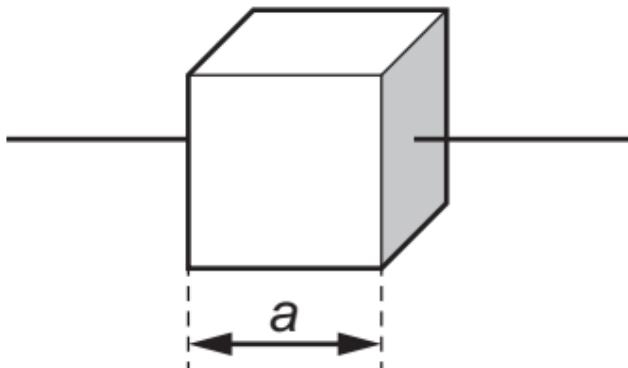


33 A metal cube with sides of length a has electrical resistance R between opposite faces.



What is the resistance between the opposite faces of a cube of the same metal with sides of length $3a$?

A $9R$

B $3R$

C $\frac{R}{3}$

D $\frac{R}{9}$