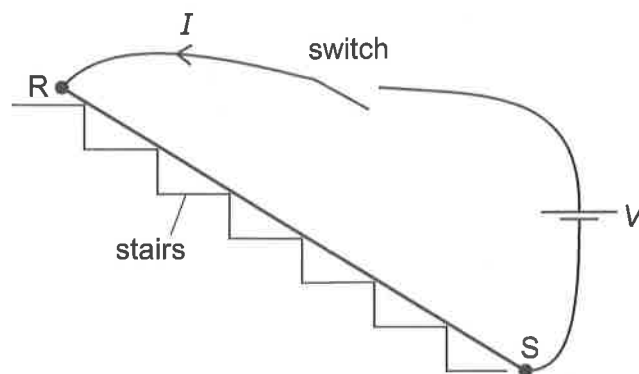


- 8 A long rigid wire of a constant cross-sectional area is laid on some stairs so that it slopes downward. The wire is made from a high-resistance metal.

A constant potential difference V is applied across the ends of a wire.



The switch is closed and there is a current I in the wire.

How do the electric potential energy and the gravitational potential energy of an electron in the wire at point S compare with the electric potential energy and the gravitational potential energy of an electron in the wire at point R?

	electric potential at point S	gravitational potential at point S
A	higher	higher
B	higher	lower
C	lower	higher
D	lower	lower

