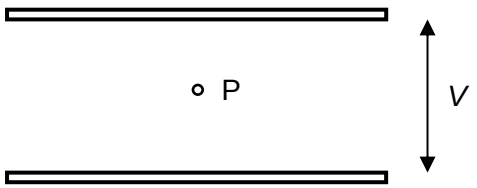
19 A small positively-charged particle P is balanced halfway between two horizontal plates when a potential difference V is applied between the plates.



When V is increased, P rises towards the upper plate.

When V is decreased, P falls towards the lower plate.

Which statement is correct?

A Decreasing V decreases both the electric and the gravitational potential energy of the particle.

B Decreasing V increases the electric potential energy and decreases the gravitational potential energy of the particle.

C Increasing V increases both the electric and the gravitational potential energy of the particle.

D The change of electric potential energy of the particle must equal the change of gravitational potential energy of the particle.