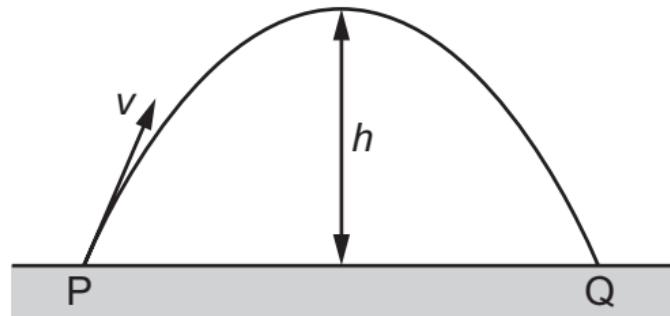


16 A ball of mass m is thrown up to height h in air with an initial velocity v , as shown.



Air resistance is negligible. The acceleration of free fall is g .

What is the **total** work done by the gravitational force on the ball during its flight from P to Q?

- A zero
- B $\frac{1}{2}mv^2$
- C mgh
- D $2mgh$