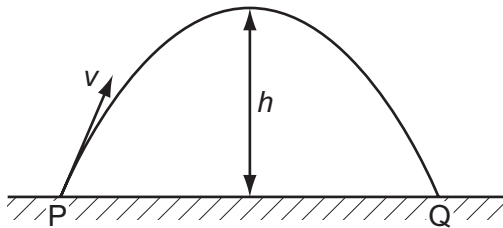


- 14 A ball of mass  $m$  is thrown up to height  $h$  in air with an initial velocity  $v$ , as shown.



Air resistance is considered 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**  $2mgh$

- 15 A spring of unextended length 10 mm is suspended from a fixed point. A load of 16 N is applied to