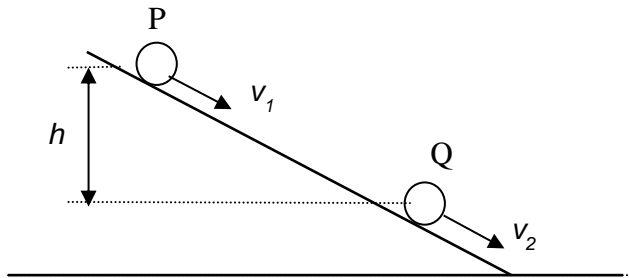


- 14 A particle of mass m is moving down a rough incline. At position P, its velocity is v_1 while at position Q, a vertical distance h down the incline, its velocity is v_2 . What is the work done against friction in going from P to Q? (Take g to be acceleration due to gravity.)



- A $\frac{1}{2} mv_2^2 - \frac{1}{2} mv_1^2$
B mgh
C $mgh - (\frac{1}{2} mv_2^2 - \frac{1}{2} m v_1^2)$
D $mgh - \frac{1}{2} mv_1^2$