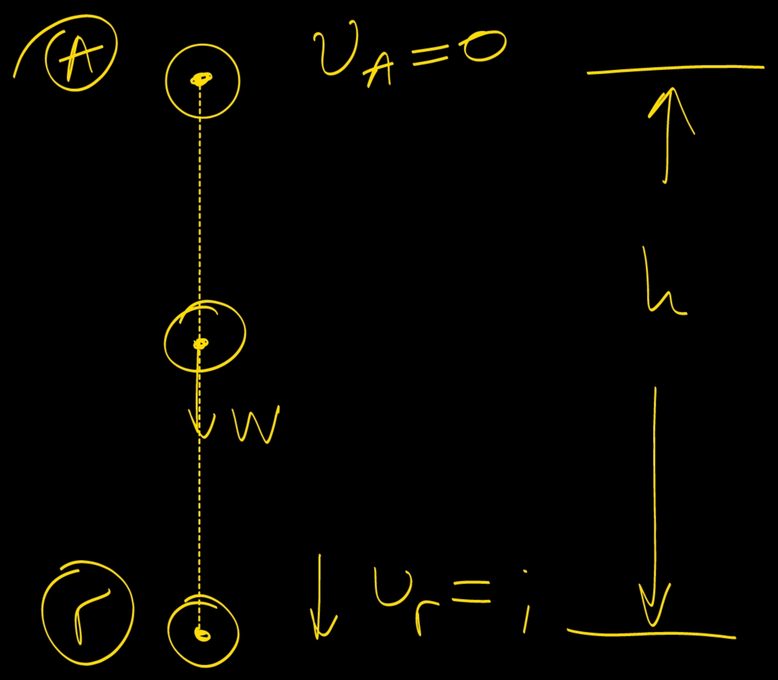
Διατήρηση μηχανικής ενέργειας.



$$W_{B(A\to\Gamma)} = m\cdot g\cdot h. = \Delta K_{(A\to\Gamma)}$$

$$\Delta U_{(A\to\Gamma)} = U_\Gamma - U_A = -(U_A - U_\Gamma) =$$

$$= -mgh.$$

Άρα: $\Delta K_{(A\to\Gamma)} + \Delta U_{(A\to\Gamma)} = 0 \Rightarrow$

$$K_\Gamma - K_A + U_\Gamma - U_A = 0 \Rightarrow$$

$$K_\Gamma + U_\Gamma = K_A + U_A.$$