

Αρχή Διατήρησης Μηχανικής Ενέργειας

• Α.Δ.Μ.Ε $A \rightarrow B$

$$E_{\text{μηχ},A} = E_{\text{μηχ},B}$$

$$U_A + E_{K,A} = U_B + E_{K,B}$$
$$\cancel{mgh_A} + \frac{1}{2}m \cdot v_A^2 = mgh_B + \frac{1}{2}m \cdot v_B^2$$

$$\frac{1}{2} \cdot 2 \cdot 20^2 = 2 \cdot 10 \cdot h_B$$

$$\frac{400}{20} = \frac{20 \cdot h_B}{20}$$

$$h_B = 20 \text{ m}$$

D $v_A = 20 \text{ m/s}$
 $g = 10 \text{ m/s}^2$
 $m = 2 \text{ kg}$

$h = ?$

$U = m \cdot g \cdot h$

$E_K = \frac{1}{2} \cdot m \cdot v^2$

$E_{\text{μηχ}} = U + E_K$

Σταθερή!!!

