

From Conservation of  
ME.

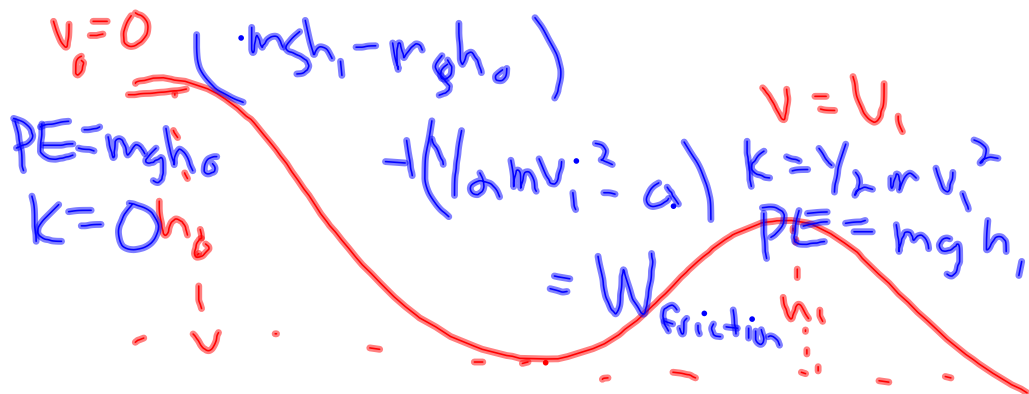
$$K_i + PE_i = K_f + PE_f$$

in the absence of the other  
non-conservative forces, i.e. friction  
air resistance, etc.

$$(KE_f - KE_i) + (PE_f - PE_i) = 0$$

if there are other external  
non-cons. forces.

$$\Delta K + \Delta P = W_{nc}$$



$$\frac{1}{2}m(v_f^2 - v_i^2) + \Delta P = +400J + -250J = W_{nc}$$

$$\Delta P = mg \Delta h$$