2. Для молотка!

$m_1 = x$ kg

Для гвоздя

$m_2 = 0.77$ kg

$E_1 = \frac{1}{2} m_1 v_1^2$

$E_2 = \frac{1}{2}(m_1 + m_2) v_2^2$

$\eta = \frac{E_2}{E_1}$

ЗСИ: $m_1 v_1 = (m_1 + m_2) v_2$

$v = \frac{m_1}{m_1 + m_2} v_1$;

$E_2 = \frac{(m_1 + m_2) m_1^2 v_1^2}{2(m_1 + m_2)^2} = \frac{m_1^2 v_1^2}{2(m_1 + m_2)}$

$\eta = \frac{E_2}{E_1} = \frac{m_1}{m_1 + m_2} = 0.43$