

1. Pismeni kolokvij iz fizike za študente FRI
(10. 12. 2014)

1. $\vec{v} = \left(20 \frac{m}{s}, -17.3 \frac{m}{s} \right)$

2. $F = 250N, A = 60.9J$

3. $h = 1.6cm, \Delta W = 0.12J$

4. Ne, ker $W_{pK} > W_{kZ}$: $W_{pK} = 0.15J, W_{kZ} = 0.056J$

5. $v(t) = v_0 \ln \left(\frac{m_V + m_k}{m_V + m_K - \Phi_m t} \right), a(0) = \frac{v_0 \Phi_m}{m_V + m_K} = 0.31 \frac{m}{s^2},$

$$v_K = v_0 \ln \left(\frac{m_V + m_K}{m_V} \right) = 1.17 \frac{m}{s}$$