



$$E_{kin} = E_{pot}$$

$$E_{pot} = m \cdot g \cdot \Delta h = 73 \cdot 9.81 \cdot 1.61 = 1152.97 \text{ N/m}$$

$$E_{kin, A} = 1152.97 \text{ N/m}$$

$$E_{kin} = \frac{1}{2} \cdot I \cdot \omega^2$$

$$I = \frac{1}{3} \cdot 73 \cdot 1.61^2 = 63.07$$

$$\omega = 6.05 \text{ rad/s}$$

$$v = \omega \cdot r$$

$$v = 9.73 \text{ m/s} \quad (\text{hooq?})$$

$$E_{kin, B} = \dots$$

$$a = \frac{1}{2} \cdot \frac{v^2}{s} = \frac{1}{2} \cdot \frac{9.73^2}{2.53} = 18.73 \text{ m/s}^2$$

$$s_{b\ddot{y} B} = \angle \alpha = 90 - \tan^{-1}\left(\frac{0.7}{1.4}\right) = 63.43$$

$$s_{b\ddot{y} B} = \left(\frac{63.43}{360}\right) (2\pi \cdot 1.61) = 1.78 \text{ m}$$

$$v_{b\ddot{y} B} = \sqrt{2 \cdot 18.73 \cdot 1.78} = 8.17 \text{ m/s}$$

$$\omega_{b\ddot{y} B} = \frac{8.17}{1.61} = 5.08 \text{ m/s}^2$$

$$E_{kin, B} = \frac{1}{2} \cdot 63.07 \cdot 5.08^2 = \underline{\underline{812.32 \text{ N/m}}}$$