

17.2

DANE:

$l = 3 \text{ m}$

$m = 12 \text{ kg}$

$g \approx 10 \frac{\text{m}}{\text{s}^2}$

SZUKANE:

$W = ?$

Udaj danihina byj na znam to by geometriychny model no znamo by

na znam, uvek:

$E_{pot} = 0$

by by podnosim by model geometriychny model no znamo by

potencijal by podnosim:

$h = \frac{1}{2} l$

potencijalna energija podnosim:

$E_{pot} = mgh$

$E_{pot} = \frac{1}{2} mgl$

Uvek nam, more vyshomno my podnosim dushing odnove znamo

by energy, pot.

$W = \Delta E_{pot}$

$W = E_{pot} - E_{pot0}$

$W = \frac{1}{2} mgl - 0$

$W = \frac{1}{2} mgl$

Podnosim odnove lichom:

$W = \frac{1}{2} \cdot 12 \text{ kg} \cdot 10 \frac{\text{m}}{\text{s}^2} \cdot 3 \text{ m} = 180 \text{ kg} \cdot \frac{\text{m}^2}{\text{s}^2} = 180 \text{ J}$

Odn. Min. more vyshomno my podnosim dushing to 180 J.