$$W_\text{п} = -\gamma m M_3 \frac{1 - h/R_3}{R_3\left(1 + h/R_3\right)\left(1 - h/R_3\right)} =$$

$$= \frac{\gamma m M_3}{R_3} \frac{1 - h/R_3}{1 - \left(h/R_3\right)^2} = \gamma \frac{m M_3}{R_3}\left(1 - h/R_3\right) =$$

$$= -\gamma \frac{m M_3}{R_3} + \gamma \frac{m M_3}{R_3^2} h = W_\text{п}\left(h = 0\right) + mgh. \qquad (2.16)$$