

N1 $v_1 = 10 \frac{m}{c}$ | $h_1 = \frac{v_1 \cos \alpha}{2}$

$\alpha = 45^\circ$

$h = 3L$ | $h_1 = \frac{10 \cdot 0,866}{2} = 4,33 m$

$h_2 = \frac{v_2 \cos \alpha}{2}$

$v_2 = ?$ | $h_2 = 3h_1 = 3 \cdot 4,33 \approx 12,99 m$
 $= 30 m/c$

$v_2 = \frac{h_2 \cdot 2}{\cos \alpha} ; v_2 = \frac{12,99 \cdot 2}{0,866}$

N2

$T = 2\pi \sqrt{\frac{e}{g}}$

$6,28 \sqrt{\frac{e}{10}}$

$\sqrt{\frac{39,4384}{1}} \cdot \frac{e}{10} = \sqrt{3,94384e} \approx 1,9859103e$

N3 $U = 12 B$

$I = 3 mA$

$R = ?$

x5m

$0,003 A$

$3000 A$

~~$R = \frac{U}{I} = \frac{12}{300} = 0,04 \Omega$~~

$R = \frac{U}{I} = \frac{12}{300} = 0,04 \Omega$

$R = \frac{U}{I} = \frac{12}{0,003} = 4000 \Omega$

$\mu / \delta \sigma : R = 0,04 \Omega$ $R = 4000 \Omega$

N4 $n = 1,5$ | $\frac{1}{F_1} = (n-1) \left(\frac{1}{R_1} + \frac{1}{R_2} \right)$

$R_1 = R_2$

$\frac{1}{F_1} = (1,5-1) \left(\frac{1}{R_1} + \frac{1}{R_2} \right) \Rightarrow \frac{1}{F_1} = 0,5 \left(\frac{2}{R} \right) \Rightarrow \frac{1}{F_1} = \frac{1}{R}$

$F = ?$

$\mu / \delta \sigma : \frac{1}{F_1} = \frac{1}{R}$