$V_0 = 0$

$t = t - 1$

$g = 9{,}8\ m/s^2$

Dit : $H = ?$

Jawab : $H = V_0 \cdot t + \frac{1}{2} g \cdot t^2$

$\frac{1}{2} H = \frac{1}{2} g t^2$

$\frac{1}{2} H = \frac{1}{2} 9{,}8 \cdot 1$

$\frac{1}{2} H = 4{,}9\ m$

$H = 4{,}9 \times 2$

$= 9{,}8\ m$

$\frac{1}{2} g t^2 = 0$

$\frac{1}{2} \cdot 9{,}8 (t-1)^2 = 0$

$4{,}9 (t^2 - 2t + 1) = 0$

$4{,}9t^2 - 9{,}8t + 4{,}9 = 0$

$t^2 - 2t + 1 = 0$

$(t-1)^2 = 0$

$t = 1$

Dik : $m = 0{,}20\ kg$

$h = 5m$

$m = 0{,}01\ kg$

$V_0 = 500\ m/s$

$s = 20m$

$g = 10\ m/s^2$

Dit : a.) $t_s = ?$

b.) $V_0' = ?$

c.) $t_p = ?$

d.) $s_p = ?$

e.) E_k terbuang $= ?$

Jawab :

~~a.) $MV_1 + mV_0 = MV_1' + mV_0'$~~

a.) $H = \frac{1}{2} g t^2$

$5 = \frac{1}{2} \cdot 10 \cdot t^2$

$5 = 5t^2$

$1 = t$

b.) $v = \frac{s}{t} = \frac{20}{1} = 20 \text{ m/s}$

c.) $t = \sqrt{\frac{2h}{g}} = \sqrt{\frac{20}{10}} = 1 \text{ s}$

d.) $v_h = \frac{v_0}{h} = \frac{500}{5} = 100 \text{ m}$

e.) • skip pak

3.) Dik : $m_b = 50 \text{ g} = \cancel{0,5 \text{ kg}}\ 0,05 \text{ kg}$
$h = 20 \text{ cm} = 0,2 \text{ m}$
$L_p = 0,4 \text{ m}$
$m_p = 100 \text{ g} = 0,1 \text{ kg}$

~~Dit : a.)~~

Jawab : a.) $P = m \cdot v$

$v = \frac{P}{m_b} = \frac{0,05 \cdot 2}{0,05} = 2 \text{ m/s}$

b.) $L = P \times r$

$L = m \times v \times r$

$= 0,05 \times 2 \times 0,4$

$= 0,04 \text{ kg m/s}^2$