$\cos\beta = \frac{m_2 v_2}{\dots}$

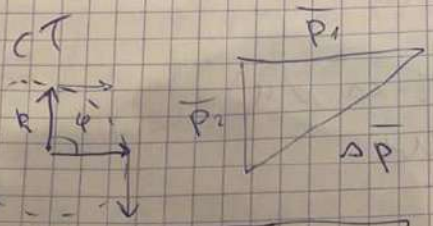
Тест

1) $\varphi = \frac{\pi}{2}$

$t = 2c$

$R = 1,2 м$

$\Delta p - ?$



$\Delta p = \sqrt{(mv)^2 + (mv)^2} = mv\sqrt{2}$

$v = \frac{s}{t}$; $s = R\varphi$

$\Delta p = m\frac{s}{t}\sqrt{2} = 1,33 \frac{кг \cdot м}{с}$

Ответ: 1,33

2) $m = 2 кг$

$x = A + Bt + Ct^2 + Dt^3$

$C = 1 м/с^2$

$D = -0,2 м/с^3$

$t_1 = 2c$

$t_2 = 5c$

$t - ?$

$F = mg$; $a = x'' = 2C + 6Dt$

при $t_1 = 2c$ $a_1 = -0,4 м/с^2$

при $t_2 = 5c$ $a_2 = -4 м/с^2$

$F_1 = ma_1 = -0,8 Н$

$F_2 = ma_2 = -8 Н$

$F = 0$

$a = 2C + 6Dt = 0$

$2 - 6 \cdot 0,2t = 0 \Rightarrow t = 1,67 c$

Ответ: $-0,8 Н$; $-8 Н$; $1,67 c$