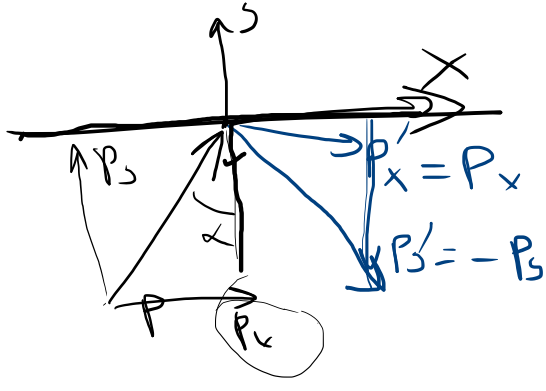
Закон сохранения энергии

$$p = m\vec{v}$$

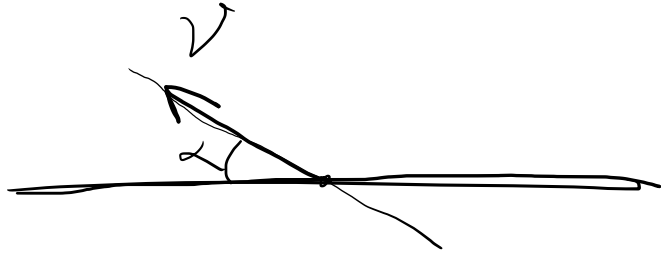
Закон сохранения импульса

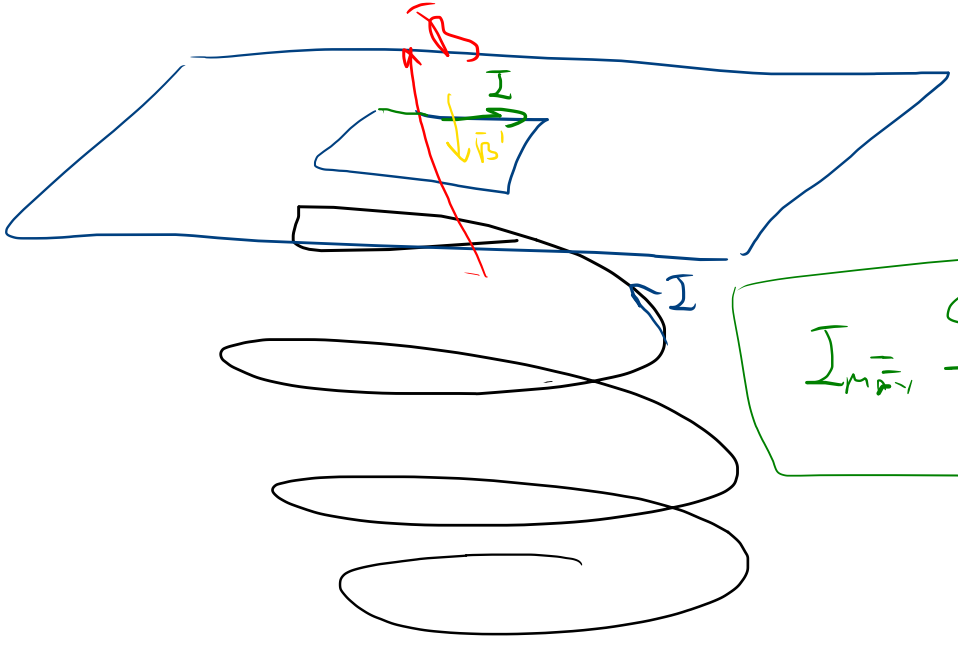
$$\Delta P_{\Sigma} = 0$$




$$\Delta P = P_y - (-P_y) = 2P_y$$

1.



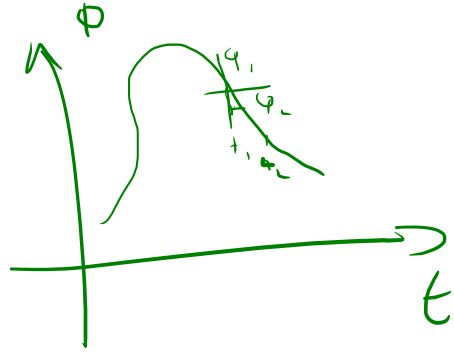



$$I_{max} = \frac{\mathcal{E}_{max}}{R}$$

$$\mathcal{E} = -\frac{\Delta\Phi}{\Delta t} = \frac{(\Delta\vec{B}\cdot S)}{\Delta t} = \frac{\partial B_0(\sin\omega t)}{\Delta t}|S| =$$

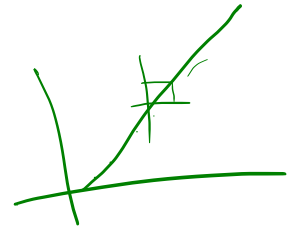
$$= B_0|S|\frac{\partial \sin\omega t}{\partial t} = B_0|S|\omega\cos\omega t$$

$$\mathcal{E}_i = \frac{\Delta\Phi}{\Delta t}$$




$$\frac{\Phi_2 - \Phi_1}{t_2 - t_1} = \mathcal{E}_i$$

$\Delta t \to 0$



$\Phi(t)$

$$\mathcal{E} = \frac{d\Phi(t)}{dt}$$

$\Phi(t) = 2t$

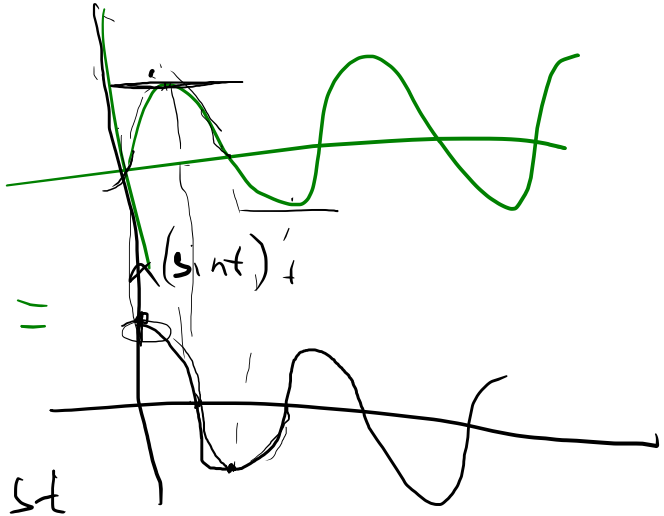
$$\frac{\partial\Phi(t)}{\partial t} = 2$$

$\sin t$

$(\sin t)'_t = \frac{d \sin t}{dt} =$

$= \frac{\partial \sin t}{\partial t} = \cos t$

Сейчас

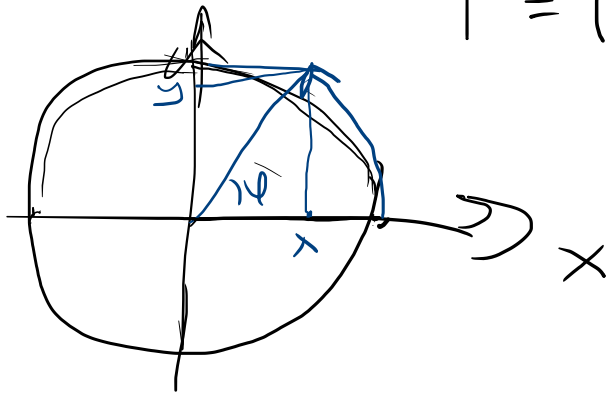


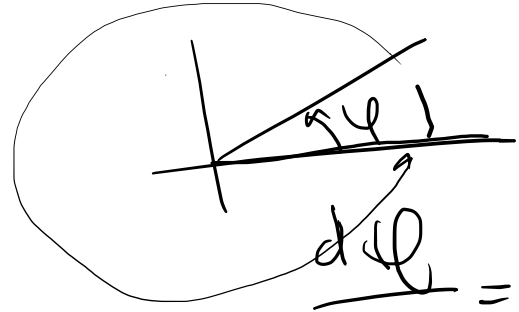
$$(\sin(\omega t))' = \cos \omega t \cdot (\omega t)' =$$

$$= \cos \omega t \cdot (\omega)$$

$\mathcal{E}_i = B l s \omega \cos \omega t$ $= 1$

$T = 1c$




$\frac{d\varphi}{dt} = \omega$

$X = \cos(\omega t)$

$y = \sin(\omega t)$

$\omega = 2\pi\nu$

$\omega = \frac{\varphi}{t}$

$\varphi = \omega t$

$$\varphi = \cos \omega t$$

$$\frac{d\varphi}{dt} = -\omega \sin \omega t$$

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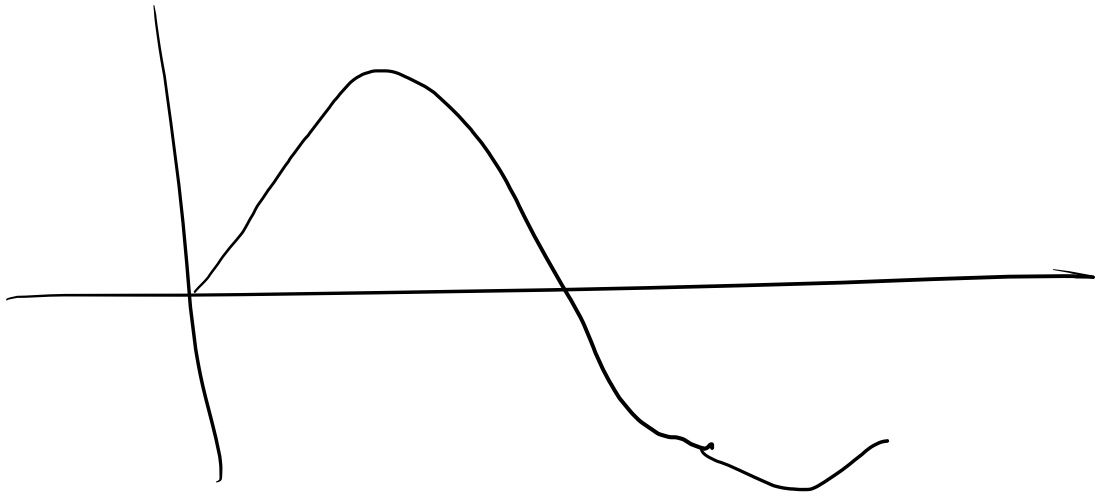
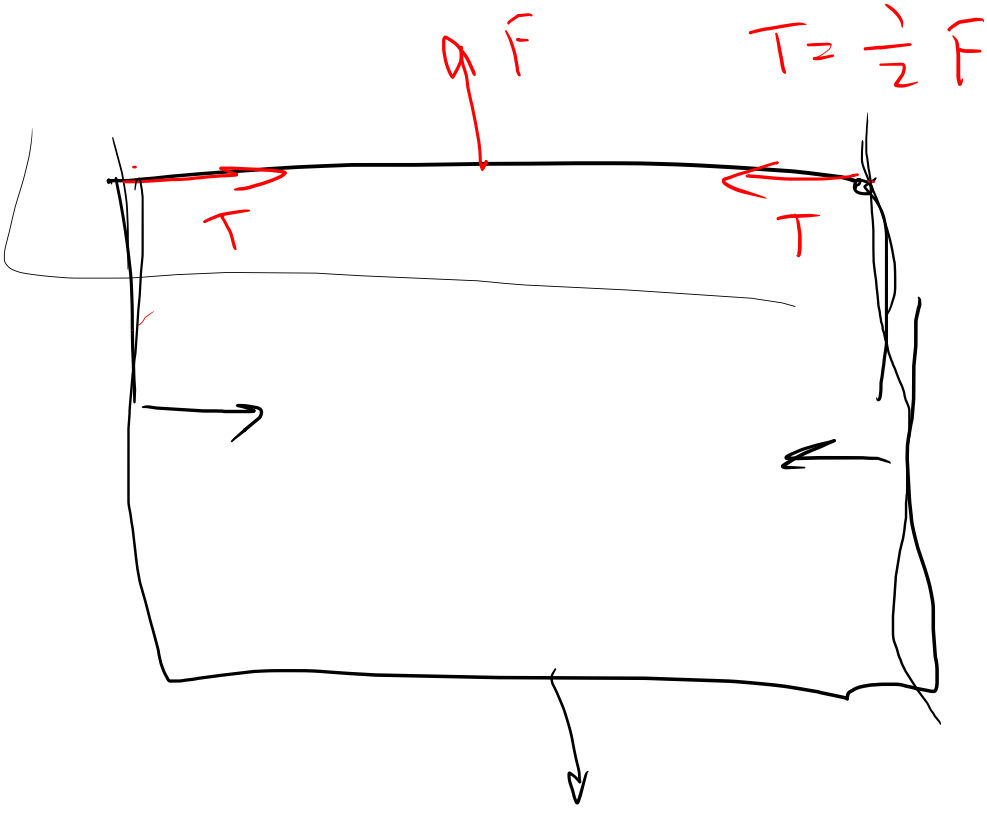
$$\varphi = \sin \omega t$$

$$\frac{d\varphi}{dt} = \omega \cos \omega t$$




F
T = 1/2 F
T
T