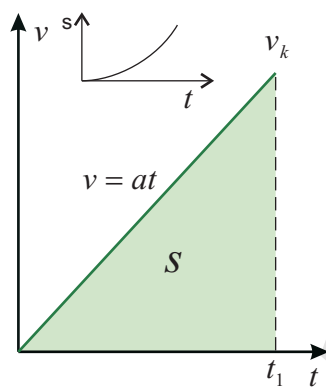


Enakomerno pospešeno gibanje



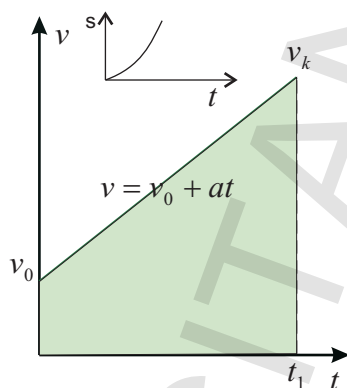
$$v_k = at_1$$

$$s = \frac{t_1 \cdot v_k}{2} = \frac{a \cdot t_1^2}{2}$$

s = ploščina pod grafom $v(t)$

$$t_1 = \sqrt{\frac{2s}{a}}$$

$$v_k = a \sqrt{\frac{2s}{a}} = \sqrt{2sa}$$

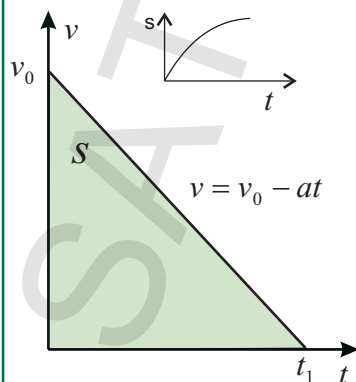


$$v_k = v_0 + at_1$$

$$s = v_0 t + \frac{at^2}{2}$$

s = ploščina pod grafom $v(t)$

$$v = \sqrt{v_0^2 + 2as}$$



$$s = v_0 t - \frac{at^2}{2}$$

s = ploščina pod grafom $v(t)$

$$t_1 = \frac{v_0}{a}$$

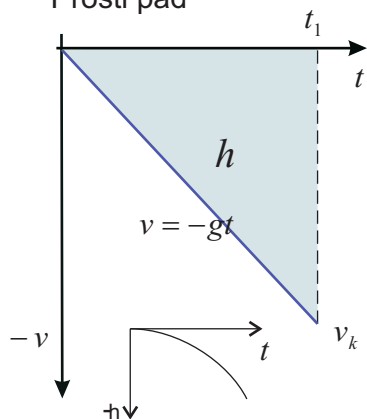
$$s_{\max} = \frac{v_0 t_1}{2} = \frac{v_0^2}{2a}$$

$$v_0 = \sqrt{2as_{\max}}$$

$$v^2 = v_0^2 - 2as$$

Navpični met – prosti pad

Prosti pad



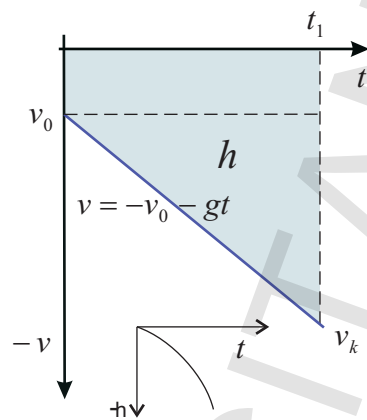
$$v_k = -gt_1$$

$$h = -\frac{v_k t_1}{2} = -\frac{gt_1^2}{2}$$

h = ploščina pod grafom $v(t)$

$$t_1 = \sqrt{\frac{2h}{g}}$$

$$v_k = -g \sqrt{\frac{2h}{g}} = -\sqrt{2hg}$$



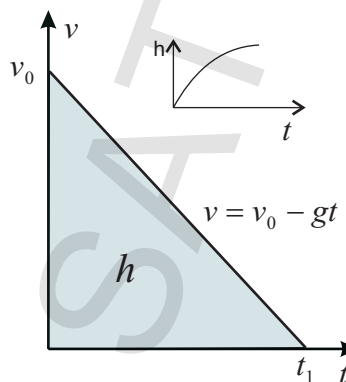
$$v_k = -v_0 - gt_1$$

$$h = -v_0 t - \frac{gt^2}{2}$$

h = ploščina pod grafom $v(t)$

$$v = -\sqrt{v_0^2 + 2gh}$$

Navpični met



$$h = v_0 t - \frac{gt^2}{2}$$

s = ploščina pod grafom $v(t)$

$$t_1 = \frac{v_0}{g}$$

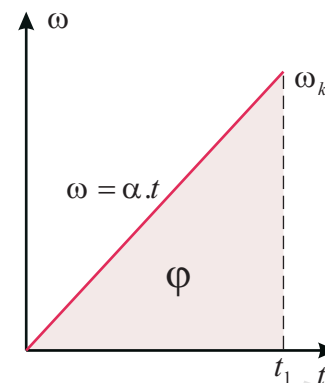
$$h_{\max} = \frac{t_1 v_0}{2} = \frac{v_0^2}{2g}$$

$$v_0 = \sqrt{2gh_{\max}}$$

$$v^2 = v_0^2 - 2gh$$

Enakomerno pospešeno kroženje

$a \Rightarrow \alpha$ $v \Rightarrow \omega$ $s \Rightarrow \varphi$

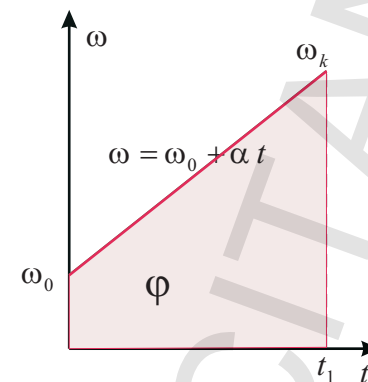


$$\omega_k = \alpha \cdot t_1$$

$$\varphi = \frac{\alpha t^2}{2}$$

$$t_1 = \sqrt{\frac{2\varphi}{\alpha}}$$

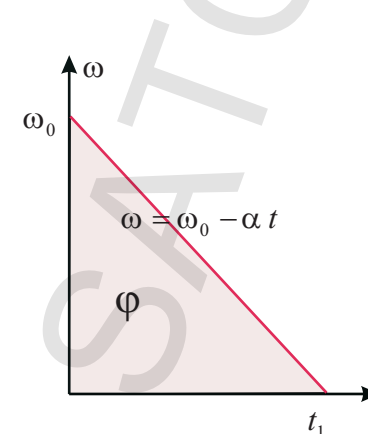
$$\omega_k = \sqrt{2\varphi\alpha}$$



$$\omega_k = \omega_0 + \alpha t_1$$

$$\varphi = \omega_0 t + \frac{\alpha t^2}{2}$$

$$\omega^2 = \omega_0^2 + 2\alpha\varphi$$



$$\varphi = \omega_0 t - \frac{\alpha t^2}{2}$$

$$t_1 = \frac{\omega_0}{\alpha}$$

$$\varphi_k = \frac{t_1 \omega_0}{2} = \frac{\omega_0^2}{2\alpha}$$

$$\omega_0 = \sqrt{2\alpha\varphi_k}$$

$$\omega^2 = \omega_0^2 - 2\alpha\varphi$$