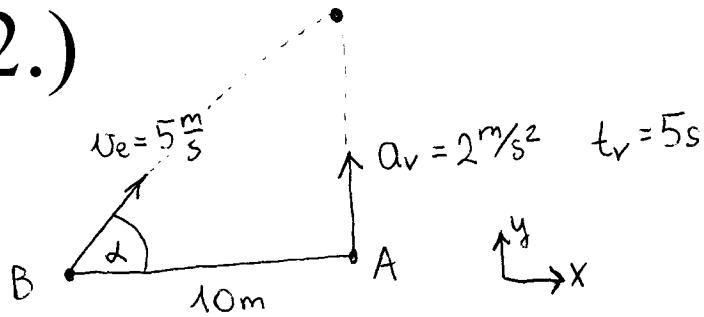


2.)



(i)  $\alpha = ?$  (ii)  $t = ?$

$$v_x = v \cos \alpha$$

$$v_y = v \sin \alpha$$

$$x = \frac{a_x}{2} t^2 + v_{0x} t + x_0$$

(i)  $x_e = v_e \cos \alpha \cdot t$

$$x_v = 10$$

$$y_e = v_e \sin \alpha \cdot t$$

$$y_v = \frac{a_v}{2} t^2$$

$t < 5s$   
feltételezve

(végén ellenőrizni kell)

Találkoznak:

$$\begin{cases} x_e = x_v \\ y_e = y_v \end{cases}$$

$$\begin{cases} v_e \cos \alpha \cdot t = 10 \rightarrow t = \frac{10}{v_e \cos \alpha} \\ v_e \sin \alpha \cdot t = \frac{a_v}{2} t^2 \leftarrow \end{cases}$$



$\alpha$  két megoldás!

(ii)

$$t = \frac{10}{v_e \cos \alpha} \leftarrow \text{"}\alpha\text{"-t (i)-ből}$$