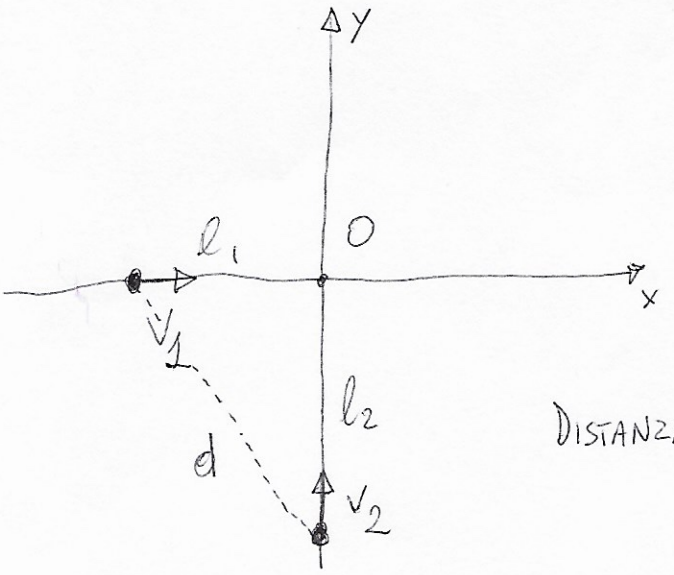
(2)



① $x = -\ell_1 + V_1 t$
$y = 0$

② $x = 0$
$y = -\ell_2 + V_2 t$

DISTANZA $d = \sqrt{(-\ell_1 + V_1 t)^2 + (-\ell_2 + V_2 t)^2}$

DISTANZA MINIMA $\frac{\partial d}{\partial t} = 0$

$$\frac{\partial d}{\partial t} = \frac{2V_1(-\ell_1 + V_1 t) + 2V_2(-\ell_2 + V_2 t)}{2\sqrt{(-\ell_1 + V_1 t)^2 + (-\ell + V_2 t)^2}} = 0$$

$$-\ell_1 V_1 + V_1^2 t - \ell_2 V_2 + V_2^2 t = 0$$

$$\boxed{t = \frac{\ell_1 V_1 + \ell_2 V_2}{V_1^2 + V_2^2}}$$

$$d_{MIN} = \sqrt{\left(-\ell_1 + V_1 \frac{\ell_1 V_1 + \ell_2 V_2}{V_1^2 + V_2^2}\right)^2 + \left(-\ell_2 + V_2 \frac{\ell_1 V_1 + \ell_2 V_2}{V_1^2 + V_2^2}\right)^2} =$$

$$= \sqrt{\frac{(-\ell_1 V_1^2 - \ell_1 V_2^2 + V_1^2 \ell_1 + V_1 V_2 \ell_2)^2 + (-\ell_2 V_1^2 - \ell_2 V_2^2 + \ell_1 V_2 V_1 + \ell_2 V_2^2)^2}{(V_1^2 + V_2^2)^2}} =$$

$$= \sqrt{\frac{\ell_1^2 V_2^4 + V_1^2 V_2^2 \ell_2^2 - 2\ell_1 \ell_2 V_1 V_2^3 + \ell_2^2 V_1^4 + \ell_1^2 V_1^2 V_2^2 - 2\ell_1 \ell_2 V_1^3 V_2}{(V_1^2 + V_2^2)^2}} =$$

$$= \sqrt{\frac{(V_1^2 + V_2^2)(\ell_1^2 V_2^2 + V_1^2 \ell_2^2 - 2V_1 V_2 \ell_1 \ell_2)}{(V_1^2 + V_2^2)^2}} = \frac{|\ell_1 V_2 - \ell_2 V_1|}{\sqrt{V_1^2 + V_2^2}}$$