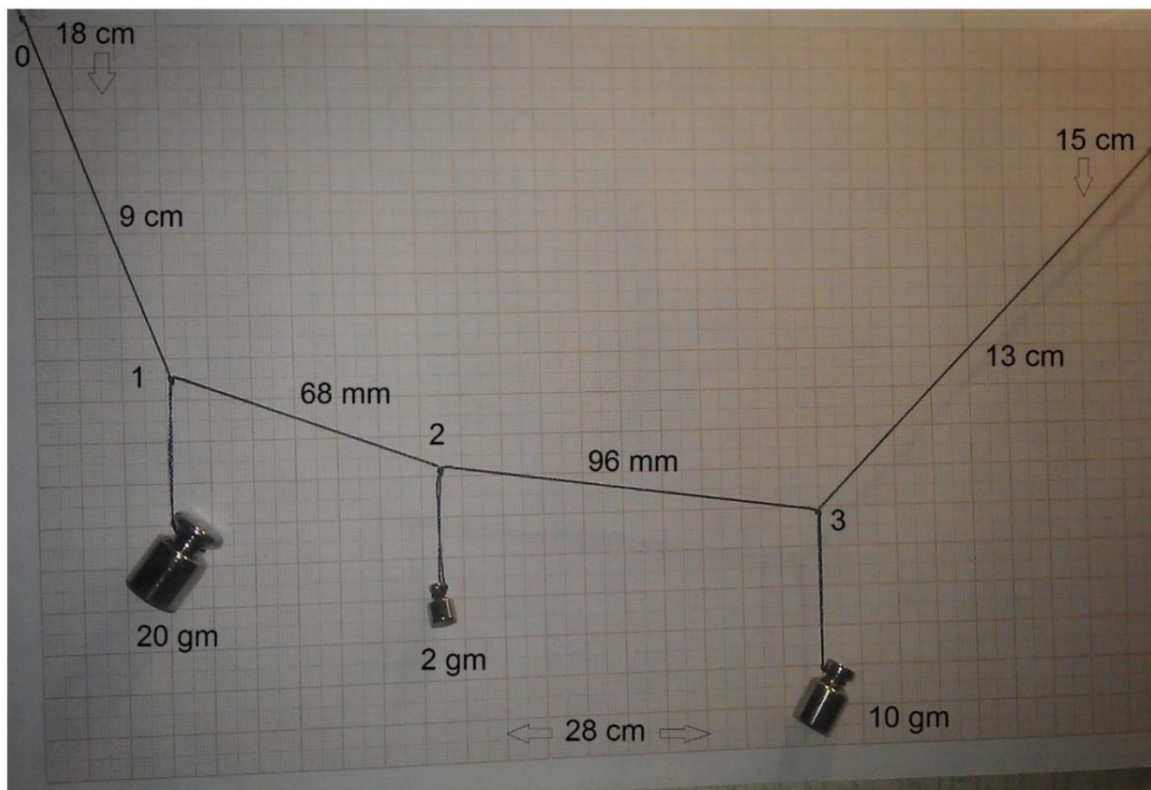




x_0	y_0	x_4	y_4	m_1	m_2	m_3	L_{01}	L_{12}	L_{23}	L_{34}
(cm)	(cm)	(cm)	(cm)	(gm)	(gm)	(gm)	(cm)	(cm)	(cm)	(cm)
0	18	28	15	20	2	10	9	6.8	9.6	13

$$PE(x_1, y_1, x_2, y_2, x_3, y_3) := g \cdot (m_1 \cdot y_1 + m_2 \cdot y_2 + m_3 \cdot y_3)$$

Ограничения

$$\begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} := \begin{bmatrix} 5 \\ 7 \\ 10 \end{bmatrix} \text{ cm} \quad \begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} := \begin{bmatrix} 10 \\ 8 \\ 7 \end{bmatrix} \text{ cm}$$

$$L_{01} = \sqrt{(x_1 - x_0)^2 + (y_1 - y_0)^2}$$

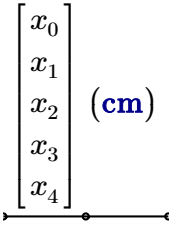
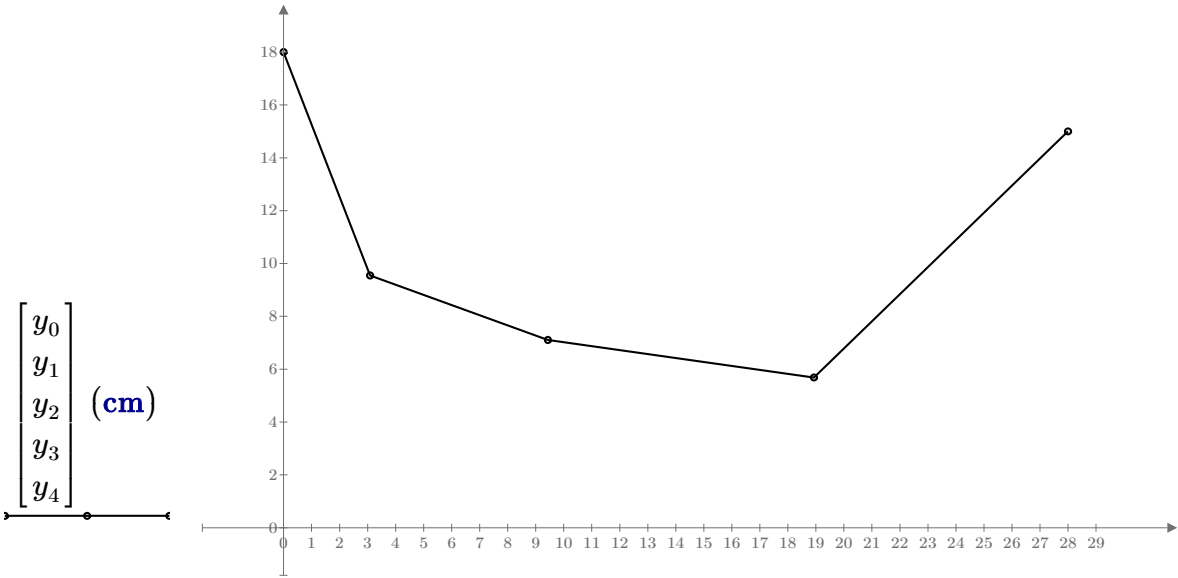
$$L_{12} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

$$L_{23} = \sqrt{(x_2 - x_3)^2 + (y_2 - y_3)^2}$$

$$L_{34} = \sqrt{(x_4 - x_3)^2 + (y_4 - y_3)^2}$$

Решатель

$$\begin{bmatrix} x_1 \\ y_1 \\ x_2 \\ y_2 \\ x_3 \\ y_3 \end{bmatrix} := \text{Minimize}(PE, x_1, y_1, x_2, y_2, x_3, y_3) = \begin{bmatrix} 3.089 \\ 9.547 \\ 9.435 \\ 7.105 \\ 18.93 \\ 5.687 \end{bmatrix} \text{ cm}$$



$$x = ?$$