



*People only believe when they are interested.
Better to leave before you make them bored.
«The Little White Horse» Elizabeth Goudge*

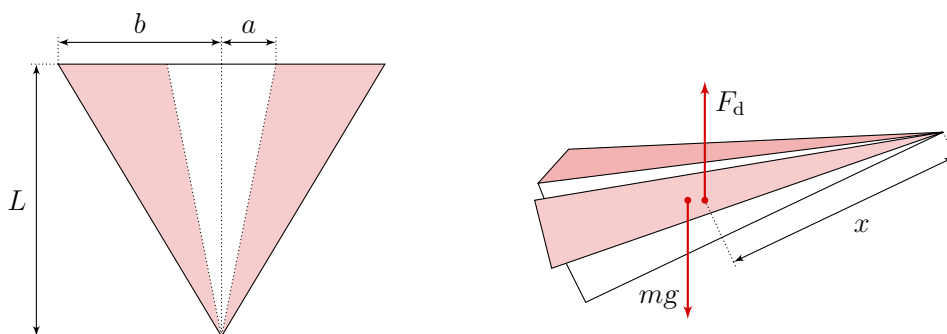
Epilogue

Each of us made paper airplanes and watched them fly. We often remember that wonderful time and now invite you to remember it with us.

The task

Let's create an airplane from A4 paper. Its net is presented in the figure, the ratio of technical characteristics is as follows:

$$\frac{a}{L} = \frac{2}{15}; \quad \frac{b}{L} = \frac{8}{15}.$$



Lift force, gravity force, and drag force (can be neglected) act on an airplane when it flies horizontally. Let the point of application of the lift force be at a distance x from the nose of the plane.

1. Investigate the dependence $x(L)$ for at least 15 lengths L with $L > 8,0$ cm. Plot a graph of this dependence.
2. Assuming $x = \xi L$, find ξ .

Equipment. A4 paper (basis weight $\sigma \approx 80$ g/m²), scissors, ruler and whatever you want.

First hint — 07.06.2021 14:00 (GMT+3)

Second hint — 08.06.2021 14:00 (GMT+3)

The Finals of the LPR Cup — 11.06.2021 12:00 (GMT+3)