



Problems – 09/25/2025

The solutions to the problems below
will be published on Sunday 09/28/2025

 **Problem 1.** Find the number of ways to distribute n indistinguishable fruits among k children assuming that each child must receive at least two.

 **Problem 2.** Prove that the equation

$$y^2 + x = \frac{x^2}{2}$$

has infinitely many solutions in integers x, y .

Good Luck!

We encourage you to submit your solutions via the website:

<https://mathlovers.eu/submit-solution/>!