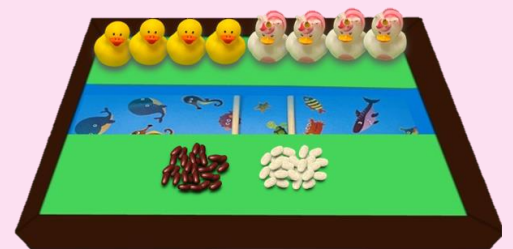
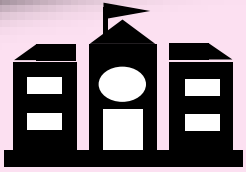


# An Interactive Introduction to Solving Equations of the First Degree



**Solve it with logic, not by looking inside the duck!**



**Setting:**  
Classroom



**Participants:**  
Grades 1–6 students



**Format:** A playful two-player game with puppets and hidden beans inside

## Workshop Structure:

In this hands-on workshop, students interact with identical duck puppets, in one or two colors. Each duck can secretly hold a small number of beans, white or red, representing hidden values.

## The Game:

On a riverbank-like play area, one player hides beans inside the ducks placed along both sides of the river. The other player's challenge is to discover how many beans are hidden in each duck based on clues and game rules.

## Main rules:

- Each yellow duck and each white duck eats the same number of beans, but in different colors
- White and red beans on the same river side can cancel each other out one-to-one.
- The total beans (eaten or leftover) on both sides of the river are equal.

## The Concept:

The mystery of the hidden beans becomes a playful path to understanding algebra. Through repeated gameplay and guided reasoning, students build an intuitive grasp of solving linear equations with one variable.

## Learning Outcomes:

By the end of the session, students will be able to:

- Understand the structure of simple linear equations,
- Identify and interpret unsolvable (contradictory) and always-true (identity) equations,
- Engage with variables as meaningful unknowns rather than abstract symbols.

