Category: Easy

Contest constraints: The question was asked in the CSI KJSCE Code in X 2017-18 competition which involved contestants unfamiliar with the Go language and were asked to solve this problem within a time of about 2hrs. The winner was expected to use minimum number of language constructs (loops, if/else conditions etc.) to solve the problem.

Concepts Tested:

1. Use of arrays 1D or 2D depending on the approach used to solve the question
2. Ability to analyse the system and simulate it
3. The observation that combination of linear equations is also a linear equation. This is needed to come up with the solution by assuming the input instead of propagating backwards.
4. Ability to use cascaded ratios and proportions