Solving Linear Equations

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The fundamental problem in linear algebra is to solve n linear equations in n unknown variables.

How do we understand a system of linear equations?

There are multiple geometric viewpoints of a system of linear equations.

- Row picture: If we look at each row (equation) individually, each row represents a set of points satisfying the equation, and the intersection of all sets of points specified by the system of equations represents the solution to the system.
- Column picture.