Linear Equations (Point sets)

Linear equations describe ***point sets***:

$$\{(s_1, s_2, \ldots, s_n) \in \mathbb{R}^n : a_1 s_1 + a_2 s_2 + \ldots + a_n s_n = b\}$$

These points are also called ***vectors***, and $\mathbb{R}^3$ is an example of a ***vector space***

The collections of numbers such that the equation holds.

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Linear Equations (Geometrically)

If a 2D linear equation is a ***line*** then a 3D linear equation is...