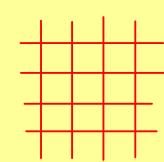
The Bright Side of Mathematics

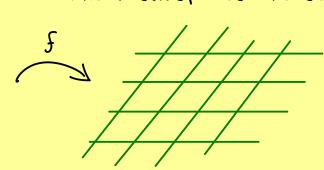


Linear Algebra - Part 21

 $f: \mathbb{R}^n \to \mathbb{R}^m$ linear

- preserves the linear structure
- linear subspaces are sent to linear subspaces





$$f: \mathbb{R}^2 \to \mathbb{R}^2$$

Examples:
$$f: \mathbb{R}^2 \to \mathbb{R}^2$$
, $f(x) = \begin{pmatrix} | & | \\ a_1 & a_2 \\ | & | \end{pmatrix} x$

