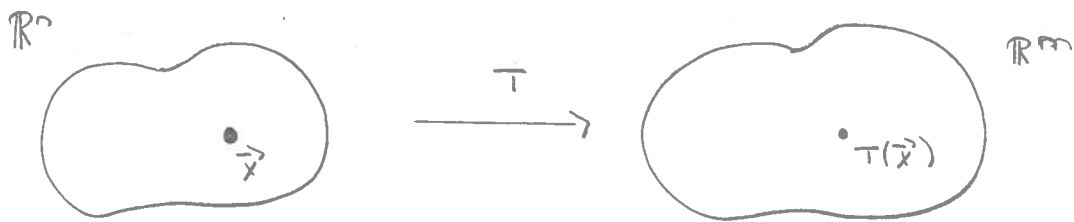


REPETITION 14/09



$T: \mathbb{R}^n \rightarrow \mathbb{R}^m$ is a linear transformation if

- $T(\vec{u} + \vec{v}) = T(\vec{u}) + T(\vec{v})$
- $T(c \cdot \vec{u}) = c T(\vec{u})$

Note: Every matrix A is a linear transformation!

→ We are going to show that every linear transformation is a matrix.