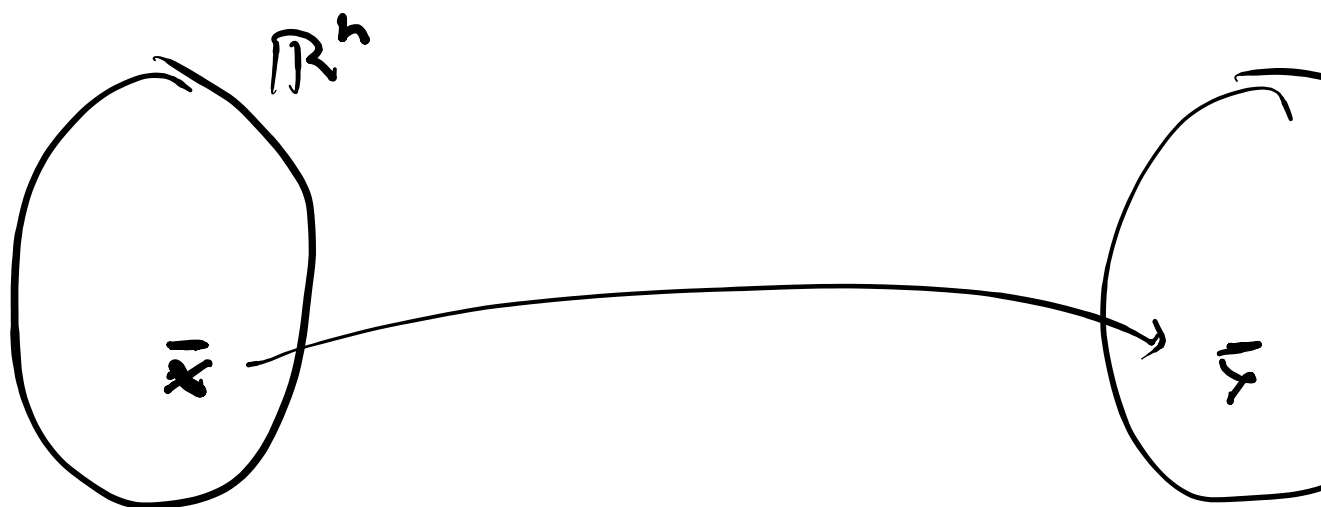


9.2. Transformación vectorial



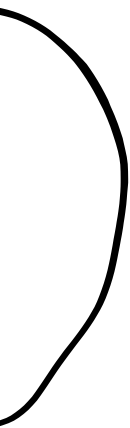
$$f: \mathbb{R}^n \longrightarrow \mathbb{R}^m$$

$$\begin{pmatrix} x_1 \\ x_2 \\ x_3 \end{pmatrix} \longrightarrow \begin{pmatrix} x_1 + 2x_2 \\ 3x_3 \end{pmatrix}$$

$$f \left[\begin{pmatrix} 1 \\ 1 \\ 1 \end{pmatrix} \right] = \begin{pmatrix} 3 \\ 3 \end{pmatrix} \in \mathbb{R}^2$$

$$\begin{pmatrix} 1 & 2 \end{pmatrix} \quad \begin{pmatrix} 1 & 1 & 1 \end{pmatrix} \quad \dots \quad 2$$

\mathbb{R}^m



$$\exists \begin{pmatrix} 4 \\ 2 \end{pmatrix} = \begin{pmatrix} 3 \end{pmatrix} \in \pi^*$$