$$\mathbb{R}^1 \coloneqq \{(x_1) | x_1 \in \mathbb{R}\}$$

x = (1)

$$\in \mathbb{R}$$

 $\mathbb{R}^2 \coloneqq \left\{ \begin{pmatrix} x_1 \\ x_2 \end{pmatrix} \middle| x_1, x_2 \in \mathbb{R} \right\} \qquad \mathbb{R}^3 \coloneqq \left\{ \begin{pmatrix} x_1 \\ x_2 \\ x_3 \end{pmatrix} \middle| x_1, x_2, x_3 \in \mathbb{R} \right\}$



