

Matrices, sistemas de ecuaciones y funciones a trozos

Tony

Matrices

- Sin paréntesis: `$$\begin{matrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{matrix}$$`

$$\begin{array}{ccc} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{array}$$

- Con paréntesis: `$$\begin{pmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{pmatrix}$$`

$$\begin{pmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{pmatrix}$$

- Con corchete: `$$\begin{bmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{bmatrix}$$`

$$\begin{bmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{bmatrix}$$

- Con barra vertical:
$$\begin{vmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{vmatrix}$$

$$\begin{vmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{vmatrix}$$

- Con llaves: $\begin{bmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{bmatrix}$

$$\begin{Bmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{Bmatrix}$$

- Norma: $\begin{vmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{vmatrix}$

$$\begin{vmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \end{vmatrix}$$

Sistemas de ecuaciones

`\begin{array}{l}\end{array}` nos produce una tabla alineada a la izquierda, con `{r}` alinea a la derecha.

`$$\left. \begin{array}{l} ax+by=c\\ ex-fy=g \end{array} \right\} \right. $$$`

$$\left. \begin{array}{l} ax + by = c \\ ex - fy = g \end{array} \right\}$$

Funciones a trozos

Se usarán dos columnas separadas por &

- Izquierda-derecha: $\$|x|=\left\{\begin{array}{lr} -x & \text{si } x\leq 0 \\ x & \text{si } x\geq 0 \end{array}\right.\right.$

$$|x| = \begin{cases} -x & \text{si } x \leq 0 \\ x & \text{si } x \geq 0 \end{cases}$$

- Derecha-derecha: $\$|x|=\left\{\begin{array}{rr} -x & \text{si } x\leq 0 \\ x & \text{si } x\geq 0 \end{array}\right.\right.$

$$|x| = \begin{cases} -x & \text{si } x \leq 0 \\ x & \text{si } x \geq 0 \end{cases}$$