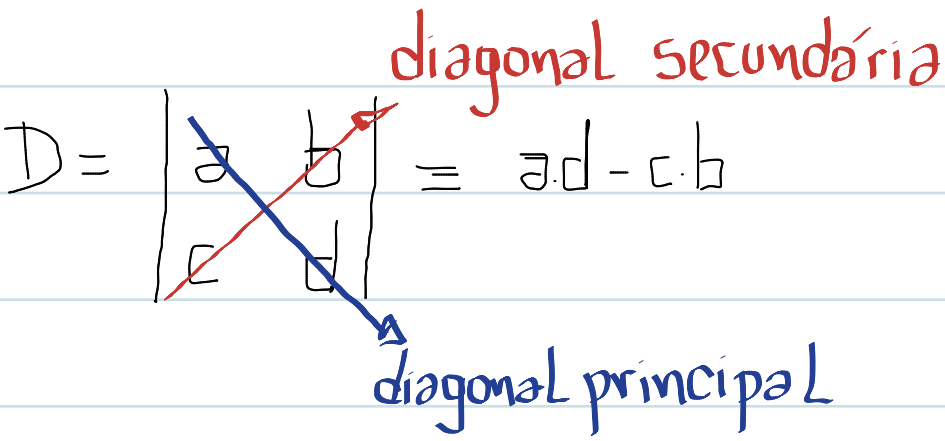
# Determinante

Seja a matriz $\begin{pmatrix} a & b \\ c & d \end{pmatrix}$, o determinante D é:




exemplo: $M = \begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix}$ ; $D = \begin{vmatrix} 1 & 2 \\ 3 & 4 \end{vmatrix} = 1 \cdot 4 - 3 \cdot 2 = -2$

Seja a matriz $\begin{pmatrix} a & b & c \\ d & e & f \\ g & h & i \end{pmatrix}$, o determinante

D é: $D = \begin{vmatrix} a & b & c \\ d & e & f \\ g & h & i \end{vmatrix} \begin{matrix} a & b \\ d & e \\ g & h \end{matrix}$

$= aei + bfg + cdh - gec - hfa - idb$

Exemplo: $M = \begin{pmatrix} 2 & 1 & 3 \\ 1 & -1 & 5 \\ 3 & 1 & -2 \end{pmatrix}$

$$D = \begin{vmatrix} 2 & 1 & 3 & 2 & 1 \\ 1 & -1 & 5 & 1 & -1 \\ 3 & 1 & -2 & 3 & 1 \end{vmatrix} = 4 + 15 + 3 + 9 - 10 + 2 = 23$$