

(* DETERMINANTE DI UNA MATRICE *)

Clear[a];

a =

{ {1, 2, 0, -1, 2}, {-1, 1, 6, -2, 0}, {2, 4, 8, -5, -1}, {3, -4, 9, 6, 0}, {-2, 0, -7, 4, 0} };

MatrixForm[

a]

$$\begin{pmatrix} 1 & 2 & 0 & -1 & 2 \\ -1 & 1 & 6 & -2 & 0 \\ 2 & 4 & 8 & -5 & -1 \\ 3 & -4 & 9 & 6 & 0 \\ -2 & 0 & -7 & 4 & 0 \end{pmatrix}$$

m15 = { {-1, 1, 6, -2}, {2, 4, 8, -5}, {3, -4, 9, 6}, {-2, 0, -7, 4} };

m35 = { {1, 2, 0, -1}, {-1, 1, 6, -2}, {3, -4, 9, 6}, {-2, 0, -7, 4} };

MatrixForm[m15]

MatrixForm[m35]

Det[a]

a[[1]][[5]] * Det[m15] + a[[3]][[5]] * Det[m35]

$$\begin{pmatrix} -1 & 1 & 6 & -2 \\ 2 & 4 & 8 & -5 \\ 3 & -4 & 9 & 6 \\ -2 & 0 & -7 & 4 \end{pmatrix}$$

$$\begin{pmatrix} 1 & 2 & 0 & -1 \\ -1 & 1 & 6 & -2 \\ 3 & -4 & 9 & 6 \\ -2 & 0 & -7 & 4 \end{pmatrix}$$

-2075

-2075