

Ayuda al cálculo on-line con WolframAlpha

Para resolver el sistema de ecuaciones

$$\begin{cases} 3x + y - 3z = 7 \\ 2x - y + z = 2 \\ x - z = 2 \end{cases}$$

hay que utilizar el comando *Solve[eqns, vars]*, donde *eqns* es el conjunto de las ecuaciones y *vars* el de las variables.

The screenshot shows the WolframAlpha search interface. At the top, the logo "WolframAlpha" is displayed with the tagline "computational knowledge engine". Below the logo, there is a search bar containing the command "Solve[{3x + y - 3z == 7, 2x - y + z == 1, x - z == 2}, {x, y}]". To the right of the search bar is a yellow rectangular button with a black border and a white square icon containing a black equals sign. Below the search bar, there is a section titled "Input interpretation:" which shows the input command again. Further down, there is a section titled "Solution over the reals:" which displays the solution: $z = -\frac{2}{3} \approx -0.666667$ and $x = \frac{4}{3} \approx 1.33333$ and $y = 1$.

Para calcular el rango de la matriz

$$\begin{pmatrix} 3 & 1 & -3 \\ 2 & -1 & 1 \\ 1 & 0 & -1 \end{pmatrix}$$

hay que utilizar el comando *MatrixRank[m]*, donde *m* es una matriz.

 **WolframAlpha**[™] computational knowledge engine

MatrixRank[{{3, 1, -3}, {2, -1, 1}, {1, 0, -1}}]

Input:
MatrixRank[$\begin{pmatrix} 3 & 1 & -3 \\ 2 & -1 & 1 \\ 1 & 0 & -1 \end{pmatrix}$]

Result:
3