

LGS lösen

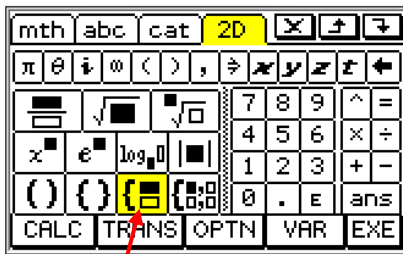
Gegeben ist das LGS

$$\begin{aligned} 2x - 3y - 4z &= 8 \\ 3x + 5y + z &= 10 \\ -4x + y - 3z &= 7 \end{aligned}$$

Variante 1 SOLVE-Befehl

```
solve({2x-3y-4z=8,3x+5y+z=10,-4x+y-3z=7},{x,y,z})  
{x=1,y=2,z=-3}
```

Variante 2 2D-Tastatur-Menü

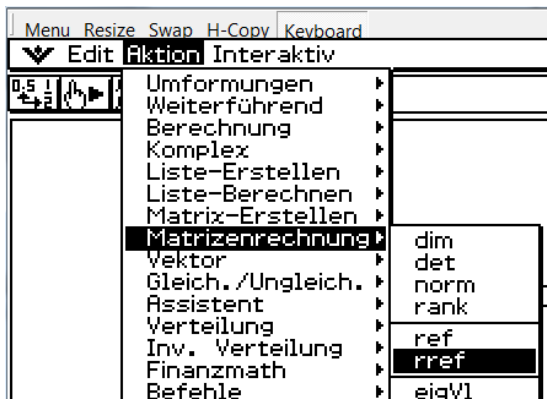


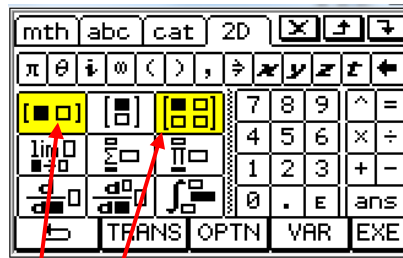
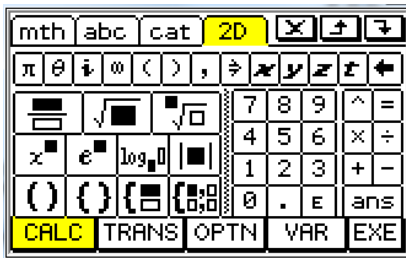
Für 3 Zeilen 2x anklicken

$$\begin{cases} 2x-3y-4z=8 \\ 3x+5y+z=10 \\ -4x+y-3z=7 \end{cases} \quad x,y,z$$

$\{x=1,y=2,z=-3\}$

Variante 3 rref mit erweiterter Koeffizientenmatrix





2x anklicken für 3x3-Matrix
1x anklicken für 3x4-Matrix

$$\text{rref}\left(\begin{bmatrix} 2 & -3 & -4 & 8 \\ 3 & 5 & 1 & 10 \\ -4 & 1 & -3 & 7 \end{bmatrix}\right)$$

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

Lösungsvektor