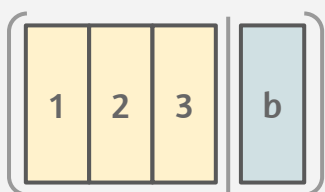


Discussió de Sistemes



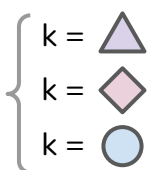
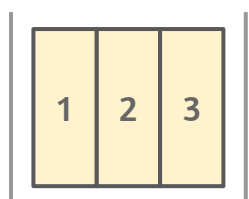
A = matriu dels coeficients (1|2|3)
 b = columna dels termes independents (b)
 A' = matriu amplificada (A|b)
 k = paràmetre que volem discutir
 r = rang de la matriu de coeficients rang(A)
 R = rang de la matriu amplificada rang(A')
 n = nombre d'incògnites a l'exemple, $n=3$



El determinant surt = 0 (em falla el rang)



El determinant surt $\neq 0$ (confirmo el rang)

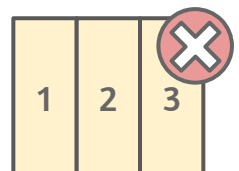


Si $k \neq \triangle$ i $k \neq \diamond$ i $k \neq \circ \rightarrow$

$$r = 3, R = 3, n = 3 \rightarrow \text{S.C.D.}$$

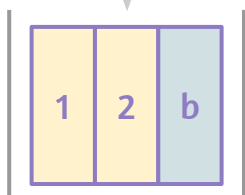
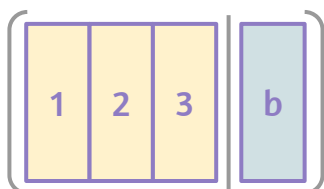

descobrim quines són les k perilloses (que fan fallar el determinant)

Si $k = \triangle, k = \diamond, k = \circ \rightarrow$

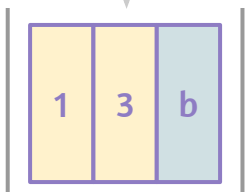
$$r < 3 \rightarrow \text{seguim investigant}$$


$k = \triangle$

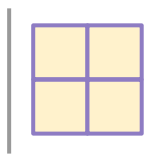
substituïm les k pel valor (per investigar aquesta k concreta)



$R = 3$ ($r < 3$)
 $r \neq R \rightarrow \text{S.I.}$



$R < 3 \rightarrow \text{seguim investigant}$

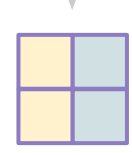


$r = 2, R = 2, n = 3 \rightarrow \text{S.C.I.}$
 $n - R = 1 \rightarrow 1 \text{ GdLL}$



si no en trobem cap que funcioni...

$r < 2$ ($r = 1$) \rightarrow seguim investigant



$R = 2$ ($r = 1$)
 $r \neq R \rightarrow \text{S.I.}$



si no en trobem cap que funcioni...

$r = 1, R = 1, n = 3 \rightarrow \text{S.C.I.}$
 $n - R = 2 \rightarrow 2 \text{ GdLL}$

$k = \diamond$

... (tornem a fer el mateix per cada k que tinguem)