



#1: [CaseMode:=Sensitive, InputMode:=Word, DisplayFormat:=Compressed, TimesOperator:=Implicit]

Ejercicio solamente para seguir una traza del procedimiento de análisis matricial tridimensional

Utilizando un vector y local auxiliar en cualquier dirección (no recomendado en este caso):

#2: y_porbis:=[1,1,1]

Elemento 1:

#3: x_local:=[0,0,1]

$$\text{z_local} := \frac{\text{CROSS}(x_{\text{local}}, y_{\text{porbis}})}{\sqrt{(\text{CROSS}(x_{\text{local}}, y_{\text{porbis}}))^2}}$$

$$\text{z_local} := \frac{[-1, 1, 0]}{\sqrt{(\text{CROSS}(x_{\text{local}}, y_{\text{porbis}}))^2}}$$

$$\text{z_local} := \frac{[-1, 1, 0]}{\sqrt{([-1, 1, 0])^2}}$$

$$\text{z_local} := \frac{[-1, 1, 0]}{\sqrt{2}}$$

$$\text{z_local} := \left[-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}, 0 \right]$$

$$\text{z_local} := [-0.7071067811, 0.7071067811, 0]$$

$$\text{y_local} := \text{CROSS}(\text{z_local}, \text{x_local})$$

$$\text{y_local} := \left[\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}, 0 \right]$$

$$\text{y_local} := [0.7071067811, 0.7071067811, 0]$$

Elemento 2:#13: $x_{local}:=[1,0,0]$

$$\#14: z_{local}:= \frac{[0, -1, 1]}{\sqrt{(CROSS(x_{local}, y_{porbis})^2)}}$$

$$\#15: z_{local}:= \left[0, -\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right]$$

#16: $z_{local}:=[0, -0.7071067811, 0.7071067811]$ #17: $y_{local}:=[0, 0.7071067811, 0.7071067811]$

$$\#18: y_{local}:= \left[0, \frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right]$$

Elemento 3:#19: $x_{local}:=[0,1,0]$

$$\#20: z_{local}:= \frac{[1, 0, -1]}{\sqrt{(CROSS(x_{local}, y_{porbis})^2)}}$$

#21: $z_{local}:=[0.7071067811, 0, -0.7071067811]$

$$\#22: z_{local}:= \left[\frac{\sqrt{2}}{2}, 0, -\frac{\sqrt{2}}{2}\right]$$

#23: $y_{local}:=[0.7071067811, 0, 0.7071067811]$

$$\#24: y_{local}:= \left[\frac{\sqrt{2}}{2}, 0, \frac{\sqrt{2}}{2}\right]$$