

$$R_{zyz} = \begin{pmatrix} 0,7071 & 0 & -0,7071 \\ 0 & -1 & 0 \\ -0,7071 & 0 & -0,7071 \end{pmatrix} \quad \text{I}$$

$$R_{zyx} = \begin{pmatrix} 0,7500 & -0,6495 & -0,1250 \\ 0,4330 & 0,6250 & -0,6495 \\ 0,5000 & 0,4330 & 0,7500 \end{pmatrix} \quad \text{II}$$

$$\text{I} \quad \theta = -1 \cdot \sin^{-1}(-0,7071) = 45^\circ \text{ (or } 0,7853 \text{ rad)}$$

$$\psi = \tan^{-1}\left(\frac{0}{-0,7071}\right) = 0$$

$$\phi = \tan^{-1}\left(\frac{0}{0,7071}\right) = 0$$

$$\text{II} \quad \theta = -\sin^{-1}(0,5) = -30^\circ \text{ (or } -0,52359 \text{ rad)}$$

$$\psi = \tan^{-1}\left(\frac{0,4330}{0,7500}\right) = 30^\circ \text{ (or } 0,52358 \text{ rad)}$$

$$\phi = \tan^{-1}\left(\frac{0,4330}{0,7500}\right) = 30^\circ \text{ (or } 0,52358 \text{ rad)}$$