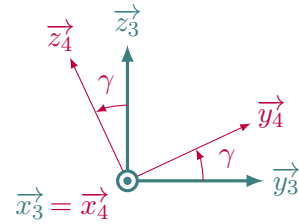
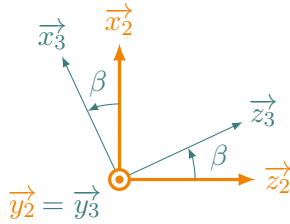
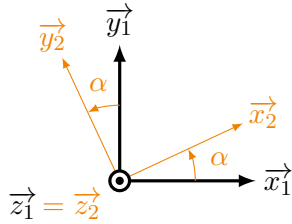




# OUTILS DE CALCUL VECTORIEL

**Q1**

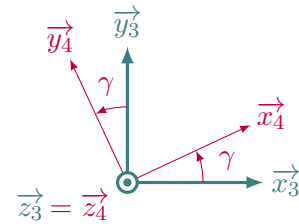
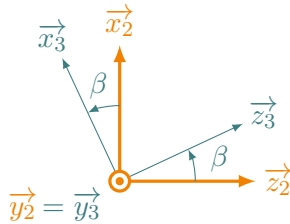
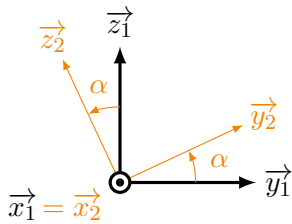
Calculer les produits scalaires suivants :



$\vec{x}_1 \cdot \vec{x}_2 =$	$\vec{x}_2 \cdot \vec{z}_3 =$	$\vec{y}_3 \cdot \vec{z}_4 =$
$\vec{z}_3 \cdot \vec{x}_1 =$	$\vec{x}_3 \cdot \vec{x}_1 =$	$\vec{z}_3 \cdot \vec{y}_1 =$
$\vec{x}_2 \cdot \vec{y}_1 =$	$\vec{x}_3 \cdot \vec{z}_2 =$	$\vec{x}_3 \cdot \vec{x}_4 =$
$\vec{x}_2 \cdot \vec{x}_1 =$	$\vec{x}_2 \cdot \vec{y}_1 =$	$\vec{x}_3 \cdot \vec{y}_4 =$
$\vec{x}_4 \cdot \vec{y}_1 =$	$\vec{z}_1 \cdot \vec{z}_4 =$	$\vec{z}_1 \cdot \vec{y}_4 =$

**Q2**

Calculer les produits vectoriels suivants :



$\vec{y}_1 \wedge \vec{y}_2 =$	$\vec{x}_2 \wedge \vec{z}_3 =$	$\vec{z}_3 \wedge \vec{z}_4 =$
$\vec{x}_1 \wedge \vec{y}_2 =$	$\vec{x}_3 \wedge \vec{x}_2 =$	$\vec{x}_3 \wedge \vec{y}_4 =$
$\vec{y}_1 \wedge \vec{z}_2 =$	$\vec{z}_3 \wedge \vec{y}_2 =$	$\vec{y}_2 \wedge \vec{x}_4 =$
$\vec{z}_2 \wedge \vec{x}_1 =$	$\vec{z}_2 \wedge \vec{x}_3 =$	$\vec{y}_4 \wedge \vec{y}_3 =$

