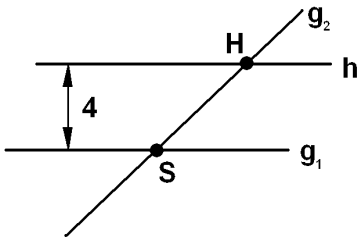
Übungen in AlgGeo ◇ Exercices en AlgGéo ◇ T. E1 ◇ I / 11

Probl. 1 $g_1: \vec{r} = \begin{pmatrix} -2 \\ 4 \end{pmatrix} + t \begin{pmatrix} 7 \\ 2 \end{pmatrix}$

$g_2: \vec{r} = \begin{pmatrix} 8 \\ 3 \end{pmatrix} + t \begin{pmatrix} -4 \\ 5 \end{pmatrix}$

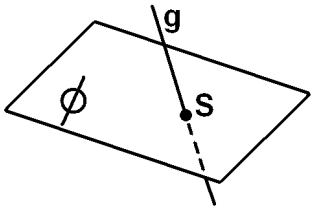
$h = ?$ $S = ?$ $H = ?$



Probl. 2 (a) $g: \vec{r} = \begin{pmatrix} -2 \\ 4 \\ 1 \end{pmatrix} + t \begin{pmatrix} 7 \\ 2 \\ -1 \end{pmatrix}$

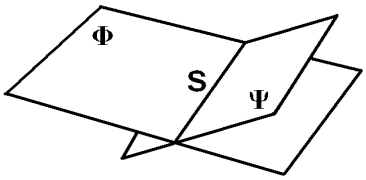
$\Phi: \vec{r} = \begin{pmatrix} 1 \\ 0 \\ -2 \end{pmatrix} + \lambda \begin{pmatrix} 4 \\ 1 \\ 4 \end{pmatrix} + \mu \begin{pmatrix} -3 \\ -2 \\ 1 \end{pmatrix}$

$S = ?$



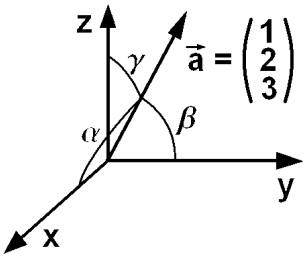
(b) $\Psi: \vec{r} = \begin{pmatrix} 0 \\ 1 \\ 1 \end{pmatrix} + \lambda \begin{pmatrix} -1 \\ 2 \\ 3 \end{pmatrix} + \mu \begin{pmatrix} 1 \\ -1 \\ 1 \end{pmatrix}$

Spurpunkt von S in der Grundebene?
• *Point d'intersection de S avec le plan fondamental?*



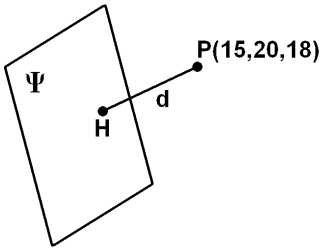
Probl. 3 (a) $\alpha = ?$ $\beta = ?$ $\gamma = ?$

(b) Drehe $\vec{a}$ in +–Richtung um $\frac{\pi}{2}$ um die z–Achse $\rightsquigarrow$ $\vec{a}\,' = ?$
• *Rotation de $\vec{a}$ vers la direction + autour de l'axe z par $\frac{\pi}{2}$* $\rightsquigarrow$ $\vec{a}\,' = ?$



Probl. 4 $\Psi: \vec{r} = \begin{pmatrix} 0 \\ 1 \\ 1 \end{pmatrix} + \lambda \begin{pmatrix} -1 \\ 2 \\ 3 \end{pmatrix} + \mu \begin{pmatrix} 1 \\ -1 \\ 1 \end{pmatrix}$

$d = ?$ $H = ?$



Probl. 5 Arbeite weiter an der Einführung in *Mathematica*! Repetiere zudem den Stoff für den nächsten Test!
• *Continuer le travail à l'introduction dans Mathematica! En plus répéter la matière pour le test prochain*