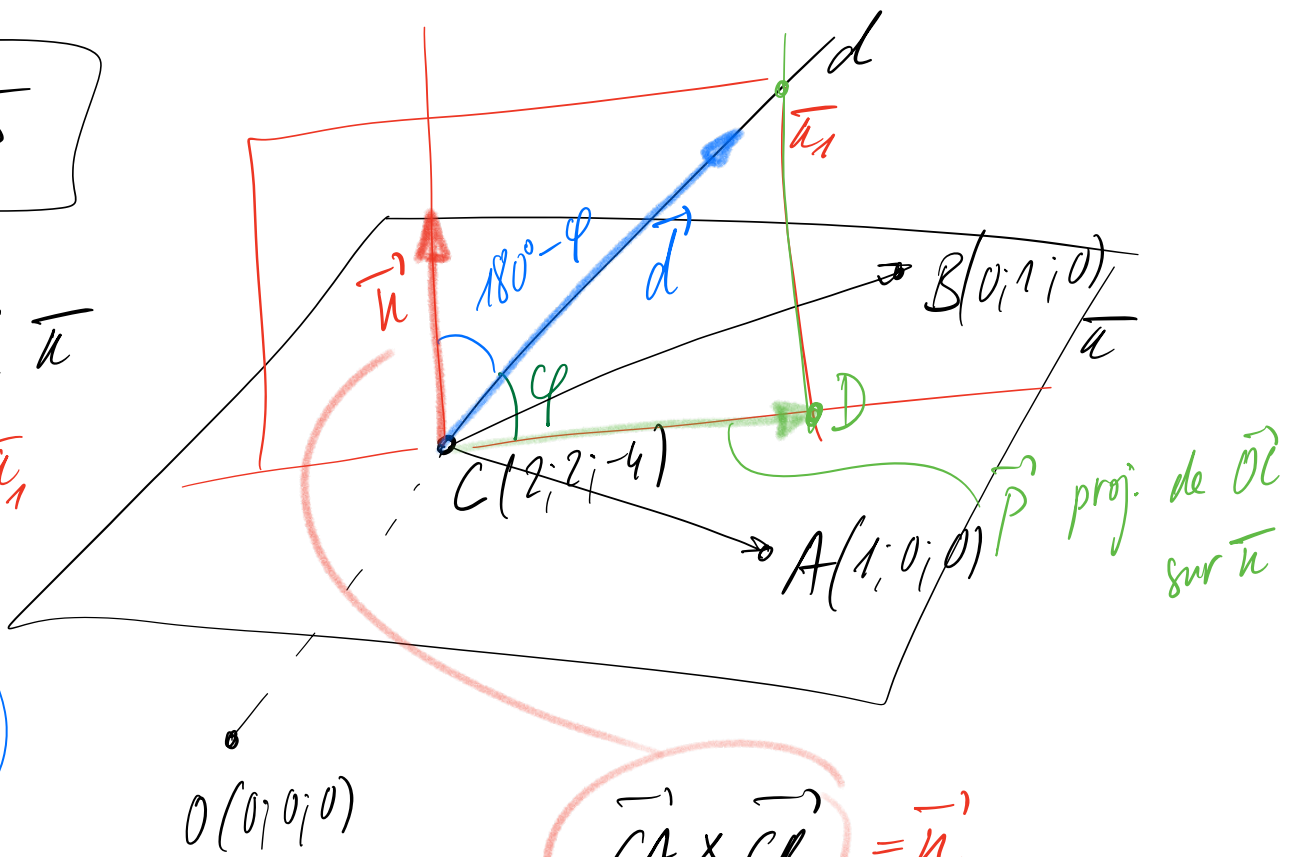


$$(1) \quad \overrightarrow{AB} \perp \overrightarrow{CD} \Leftrightarrow \overrightarrow{AB} \cdot \overrightarrow{CD} = 0$$

$$(2) \quad \boxed{A + k \cdot \overrightarrow{AB} \stackrel{?}{=} C + l \cdot \overrightarrow{CD}} \quad \leftarrow \text{systeme } 2 \times 2$$

1.5.5

$\pi_1 \perp \pi$   
 $d \in \pi_1$



$$\vec{d} = \vec{OC}$$

$$O(0; 0; 0)$$

$$\vec{CA} \times \vec{CB} = \vec{n}'$$

$$\cos \varphi = \frac{|\vec{a} \cdot \vec{b}|}{\|\vec{a}\| \cdot \|\vec{b}\|}$$

donne l'angle aigu entre  $\vec{n}$  et  $\vec{d}$

On en déduit  $\varphi = 90^\circ - \varphi$

$$\vec{a} = \vec{OC}$$

$$\vec{b} = \vec{CA} \times \vec{CB}$$