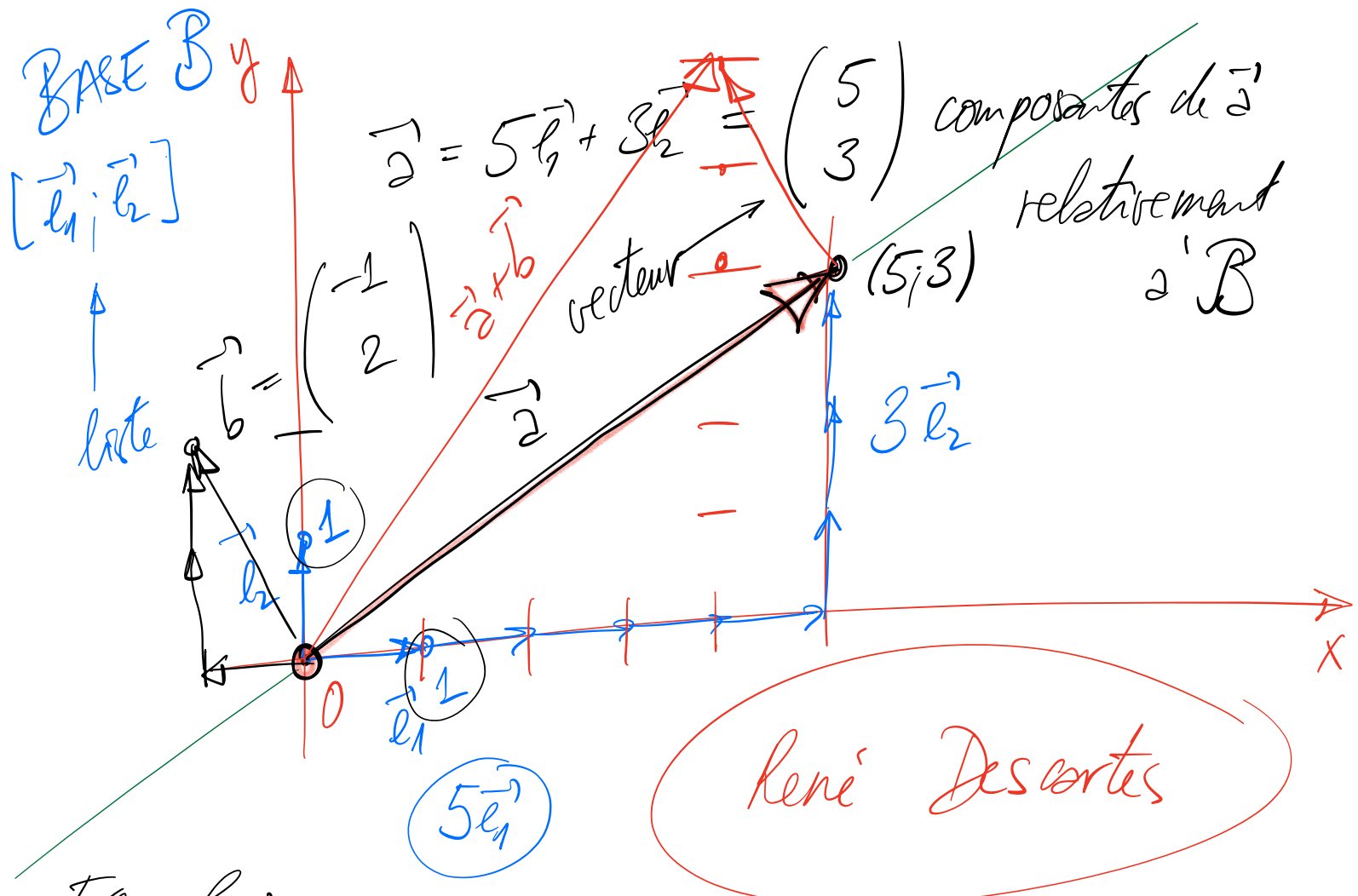




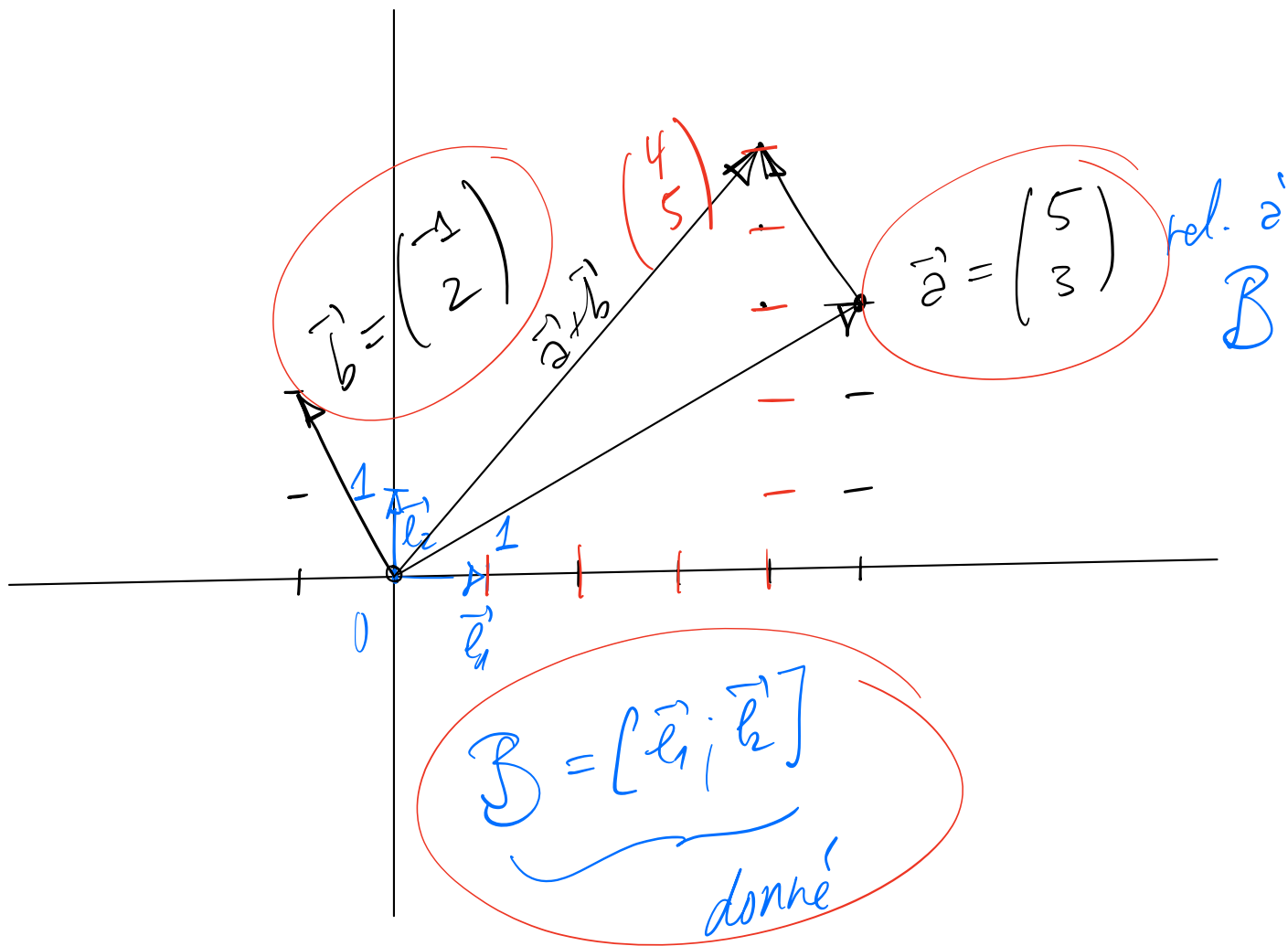
Exemple:

$$\vec{a} = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$$

$$\vec{b} = \begin{pmatrix} -1 \\ 2 \end{pmatrix}$$

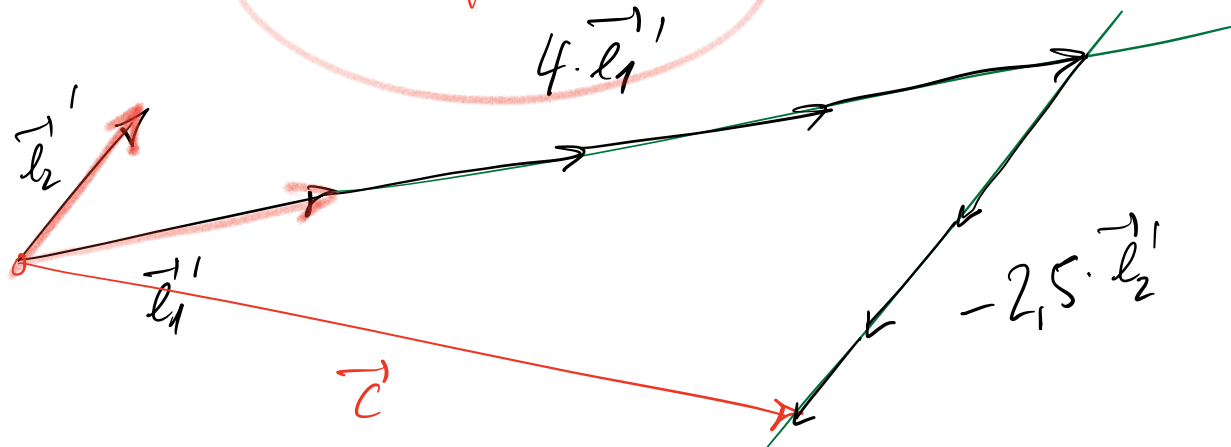
$$\vec{a} + \vec{b} = \begin{pmatrix} 5 \\ 3 \end{pmatrix} + \begin{pmatrix} -1 \\ 2 \end{pmatrix} = \begin{pmatrix} 5-1 \\ 3+2 \end{pmatrix} = \begin{pmatrix} 4 \\ 5 \end{pmatrix}$$

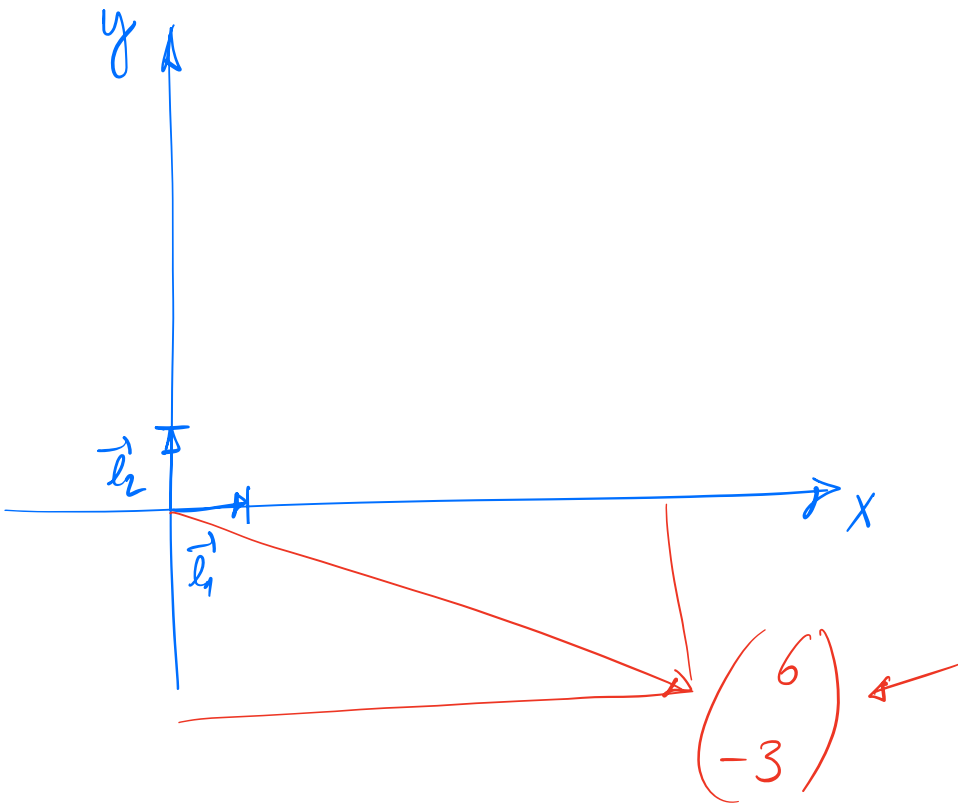
$$5 \cdot \vec{a} - 1,5 \cdot \vec{b} = 5 \begin{pmatrix} 5 \\ 3 \end{pmatrix} - 1,5 \begin{pmatrix} -1 \\ 2 \end{pmatrix} = \begin{pmatrix} 25 \\ 15 \end{pmatrix} + \begin{pmatrix} 1,5 \\ -3 \end{pmatrix} = \begin{pmatrix} 26,5 \\ 12 \end{pmatrix}$$



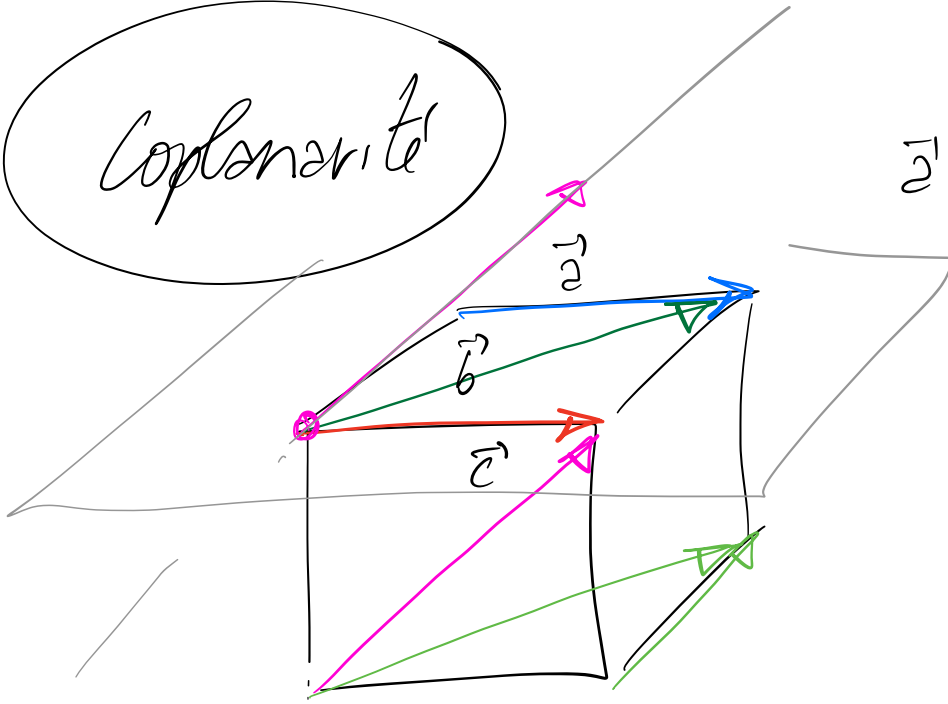
Rel. à B' , $\vec{c} = \begin{pmatrix} 4 \\ -2.5 \end{pmatrix}$ composantes

$4 \cdot \vec{e}_1'$

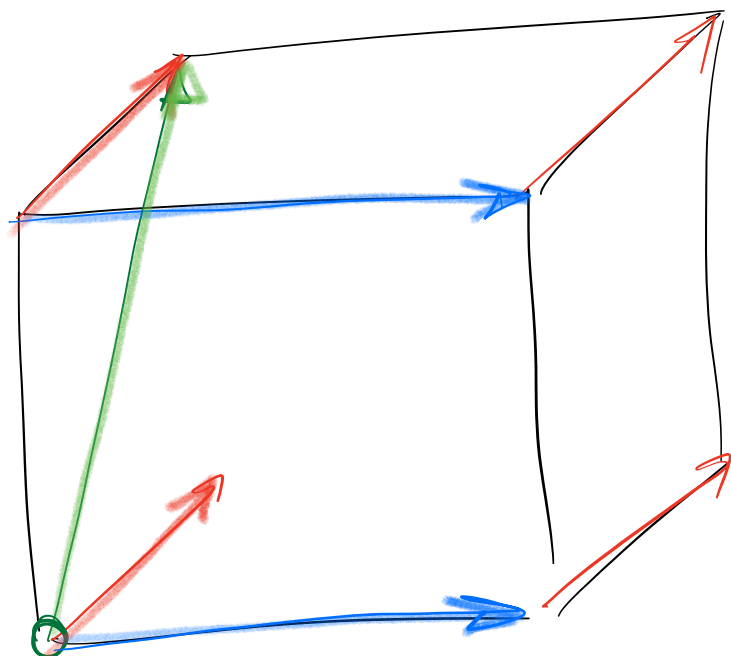
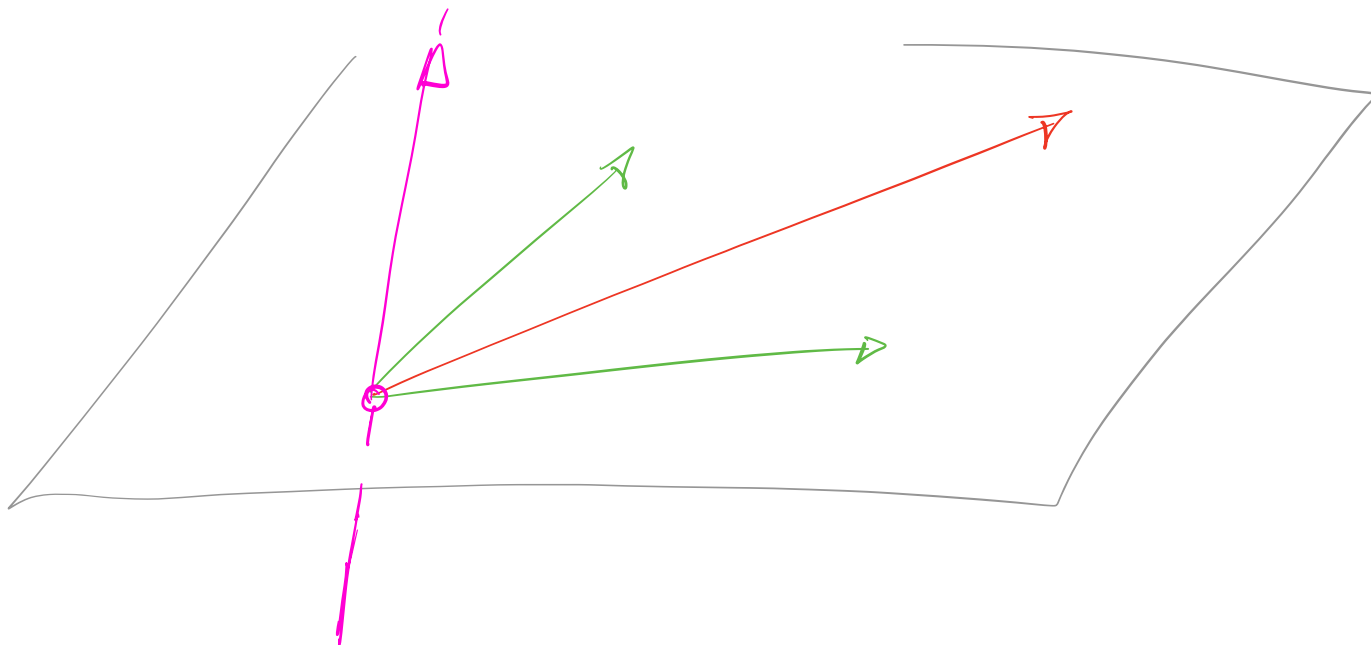




Coplanarité



$\vec{e}, \vec{l}, \vec{l}_2$ coplanaires
 ↑
 dans le
 même plan



$$\vec{AC} + 2\vec{BC} = 2\vec{CA} - 5\vec{CB} + 3\vec{AB}$$

$$\vec{XY} + \vec{YZ} = \vec{XZ}$$

$$\vec{XY} = -\vec{YX}$$

$$\vec{XX} = \vec{0}$$

$$\vec{AC} - 2\vec{CA} + 2\vec{BC} + 5\vec{CB} = 3\vec{AB}$$

$$\vec{AC} + 2\vec{AC} + 2\vec{BC} - 5\vec{BC} = 3\vec{AB}$$

$$3\vec{AC} - 3\vec{BC} = 3\vec{AB}$$

$$3\vec{AC} + 3\vec{CB} = 3\vec{AB}$$

$$3(\vec{AC} + \vec{CB}) = 3\vec{AB}$$

$$3\vec{AB} = 3\vec{AB} \quad \checkmark$$

CRAID