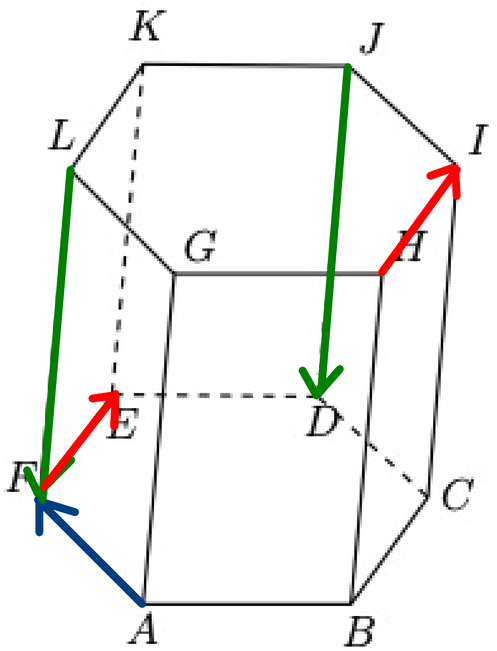
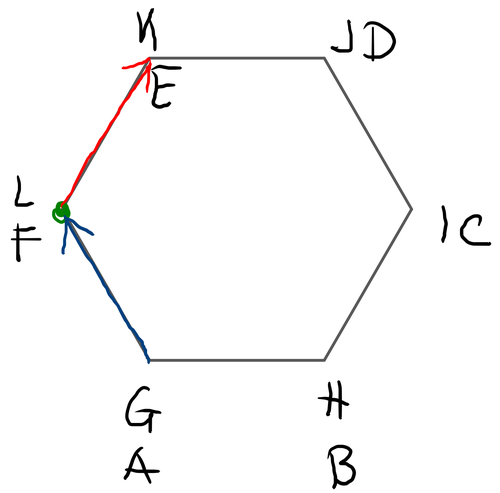
1.2.1

09.09.21

c) $\overrightarrow{AF}$, $\overrightarrow{JD}$, $\overrightarrow{HI}$

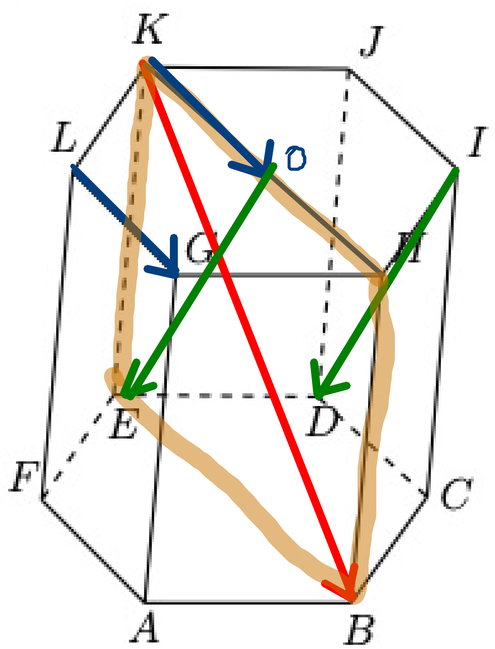



Vue du dessu




vecteurs non coplanaires

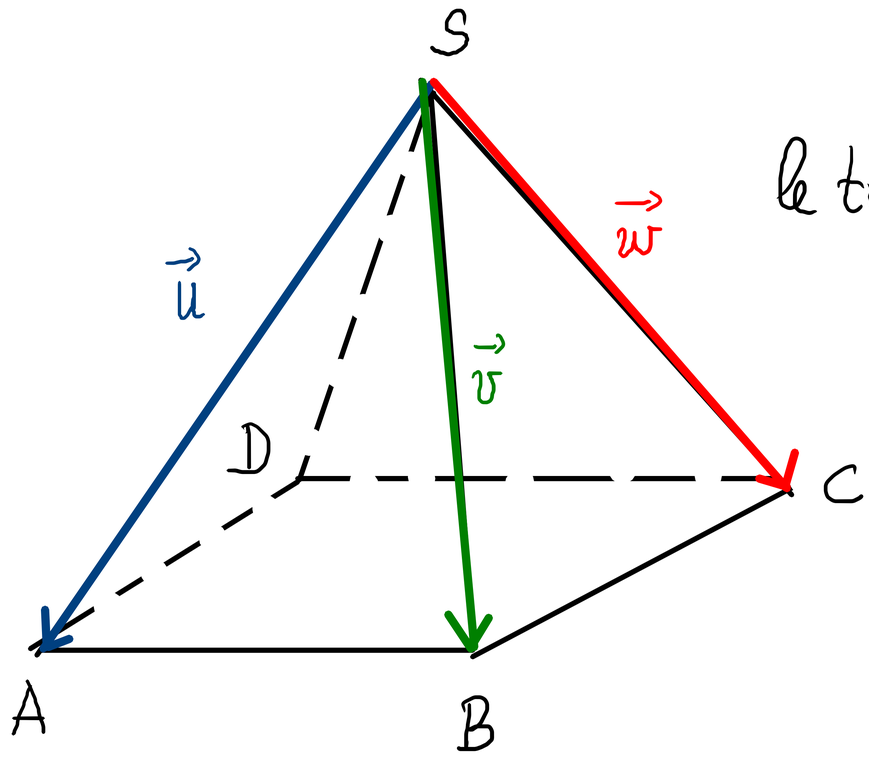
b) $\overrightarrow{LG}$, $\overrightarrow{ID}$, $\overrightarrow{KB}$




$\overrightarrow{LG}$ et $\overrightarrow{KH}$ $\Leftrightarrow$ LG // KH

plan KHBE // plan JICD

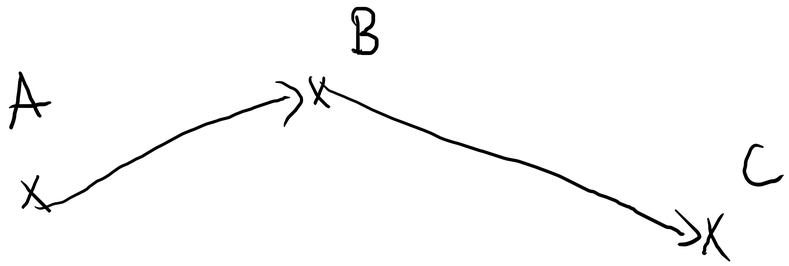
**1.2.2** Soit une pyramide de sommet $S$ dont la base $ABCD$ est un parallélogramme. On pose $\vec{u} = \overrightarrow{SA}$, $\vec{v} = \overrightarrow{SB}$ et $\vec{w} = \overrightarrow{SC}$. Réaliser une bonne figure d'étude. Exprimer chacun des vecteurs suivants comme combinaison linéaire des vecteurs $\vec{u}$, $\vec{v}$ et $\vec{w}$ : $\overrightarrow{SD}$, $\overrightarrow{AC}$, $\overrightarrow{BD}$, $\overrightarrow{AB}$, $\overrightarrow{BC}$ et $\overrightarrow{AD}$.




le triplet $(\vec{u}, \vec{v}, \vec{w})$ n'est pas coplanaire

$$\vec{SD} = \vec{SA} + \vec{AD} = \vec{u} + \vec{BC} = \vec{u} + \vec{SC} - \vec{SB} = \vec{u} - \vec{v} + \vec{w}$$

$$\vec{AC} = \vec{SC} - \vec{SA} = -\vec{u} + \vec{w}$$

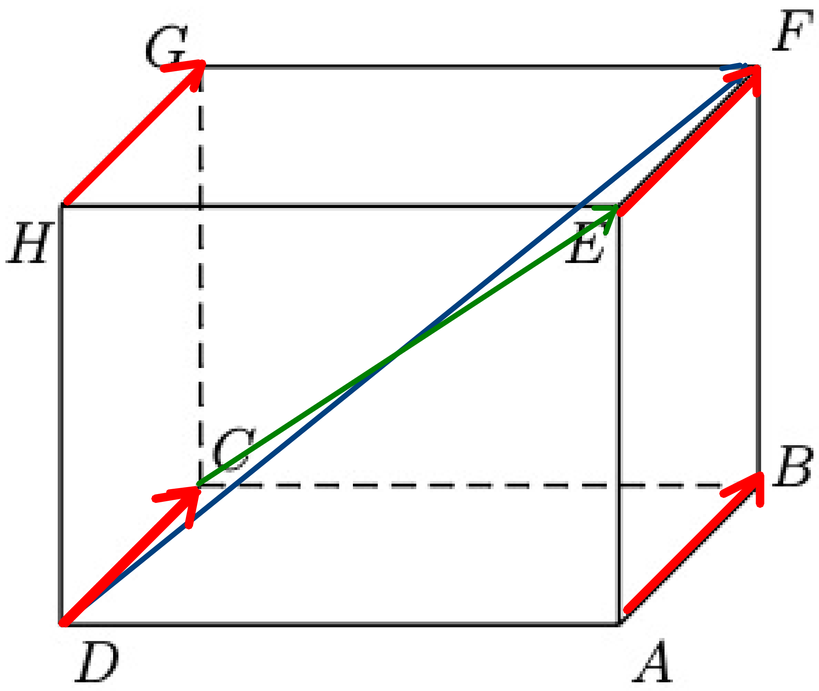



$$\vec{AB} + \vec{BC} = \vec{AC}$$


$$\vec{AB} = \vec{OB} - \vec{OA}$$

O

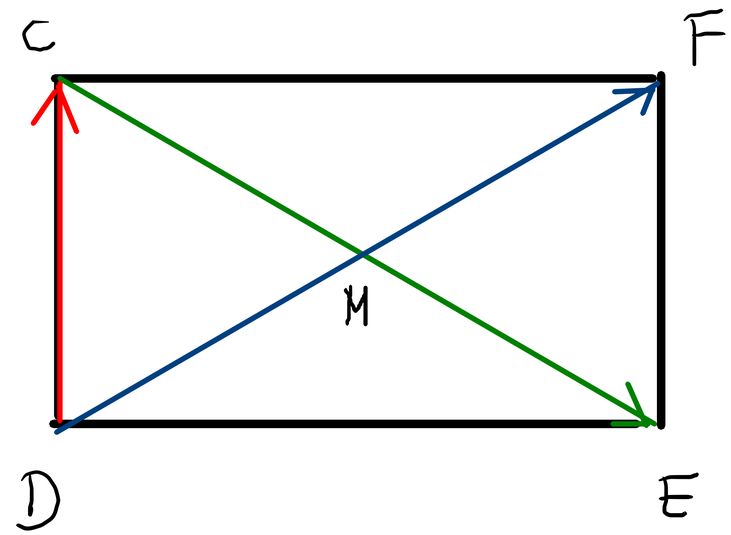
1.2.3




d) $\overrightarrow{DF}$, $\overrightarrow{EC}$ et $\overrightarrow{GH}$

$\overrightarrow{DC} = \overrightarrow{MC} - \overrightarrow{MD} = -\frac{1}{2}\overrightarrow{EC} - \left(-\frac{1}{2}\overrightarrow{DF}\right)$

$= -\frac{1}{2}\overrightarrow{EC} + \frac{1}{2}\overrightarrow{DF}$




$2\overrightarrow{DC} = \overrightarrow{DF} - \overrightarrow{EC}$