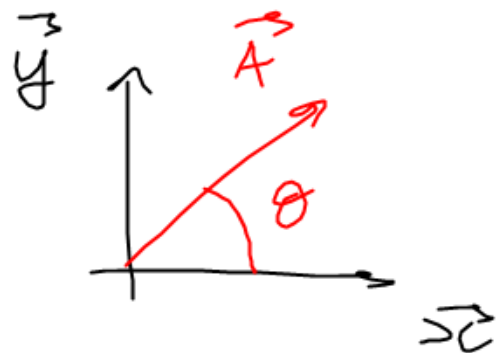
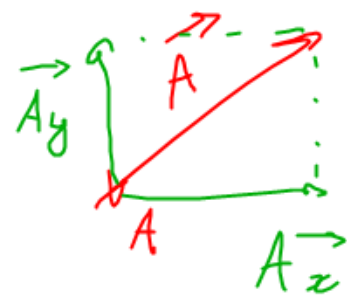
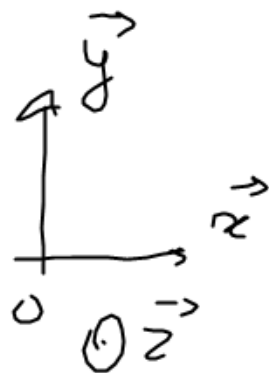
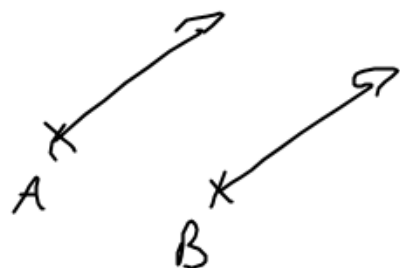
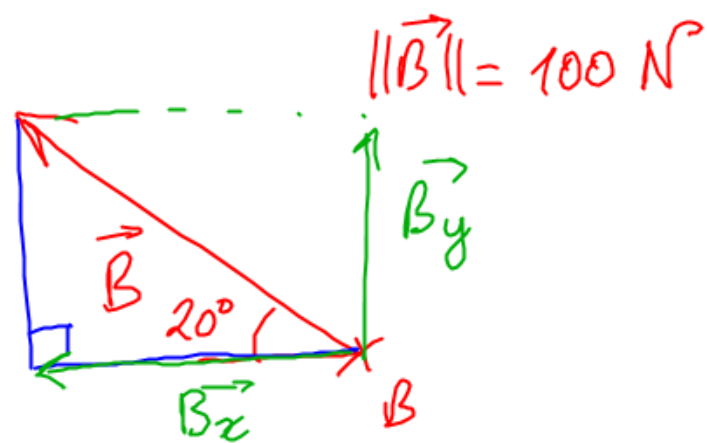
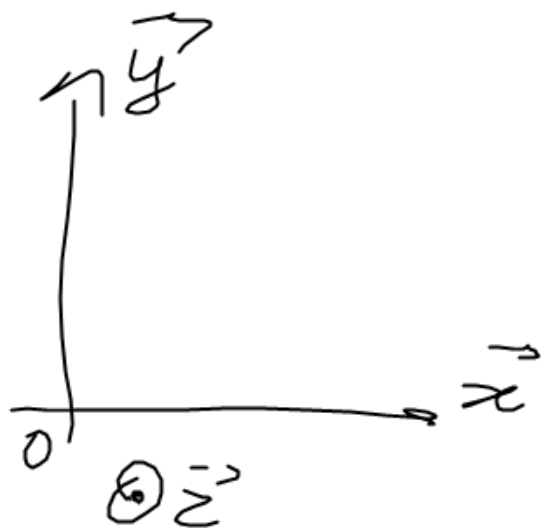




$$\vec{A} \left(\|\vec{A}\|, \theta \right)$$

$$\begin{aligned} \vec{A} &= A_x \vec{e}_x + A_y \vec{e}_y \\ \vec{A} &= \begin{pmatrix} x_A \\ 0 \\ 0 \end{pmatrix} + \begin{pmatrix} 0 \\ y_A \\ 0 \end{pmatrix} \\ &= \begin{pmatrix} x_A \\ y_A \\ 0 \end{pmatrix} \end{aligned}$$

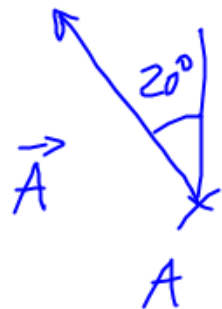
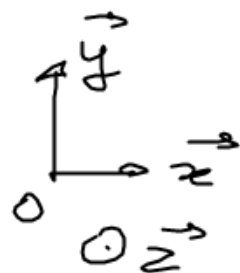
$$\vec{A} \cdot \vec{x} = \begin{pmatrix} x_A \\ y_A \\ 0 \end{pmatrix} \cdot \begin{pmatrix} 1 \\ 0 \\ 0 \end{pmatrix} = x_A$$



$$\vec{B} = \begin{pmatrix} -100 \cdot \cos 20 \\ 100 \cdot \sin 20 \\ 0 \end{pmatrix}$$

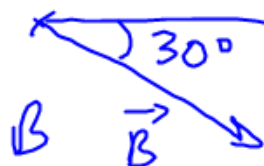
live cours modélisation adic meca + ex:

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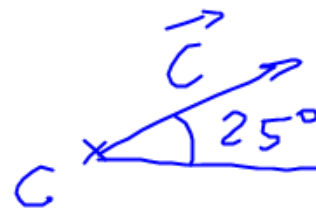
$$\|\vec{A}\| = 20 \text{ N}$$

$$\vec{A} = \begin{pmatrix} \cdot \\ \cdot \\ \cdot \end{pmatrix}$$



$$\|\vec{B}\| = 100 \text{ N}$$

$$\vec{B} = \begin{pmatrix} \cdot \\ \cdot \\ \cdot \end{pmatrix}$$



$$\|\vec{C}\| =$$

$$\vec{C} = \begin{pmatrix} 60 \\ \cdot \\ \cdot \end{pmatrix}$$



$$\|\vec{D}\| = 200 \text{ N}$$

$$\theta =$$

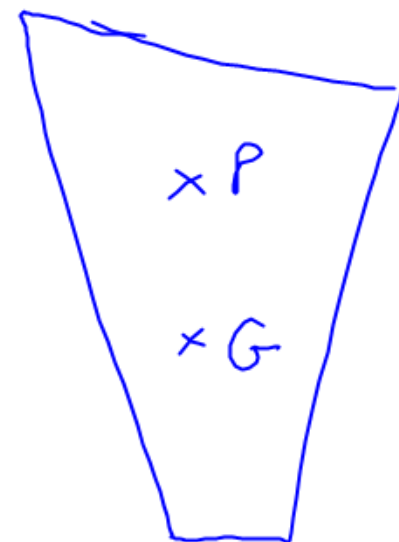
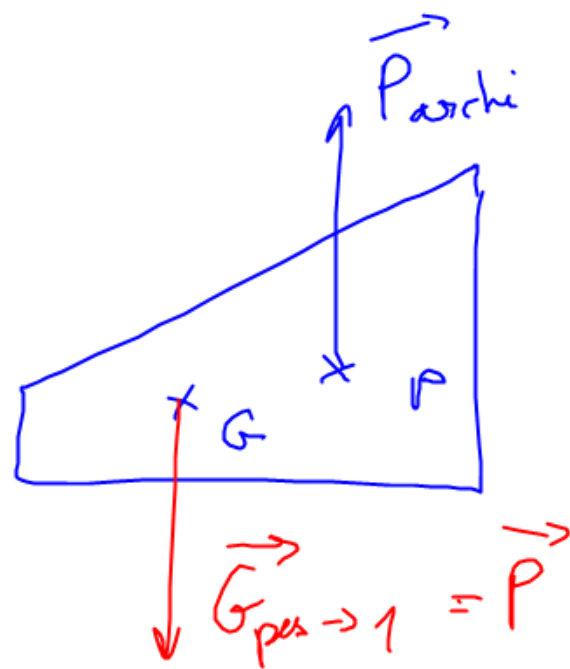
$$\vec{D} = \begin{pmatrix} \cdot \\ \cdot \\ 120 \end{pmatrix}$$

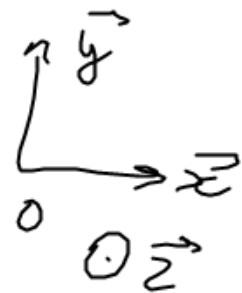
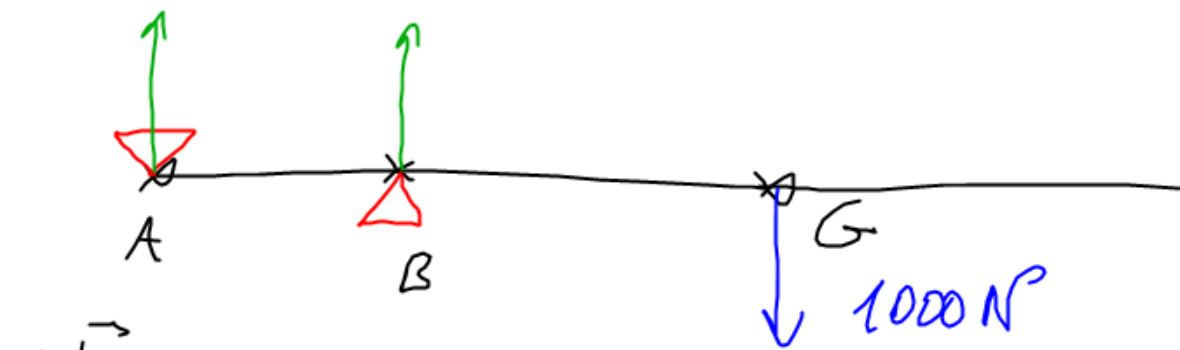


$$\|\vec{E}\| =$$

$$d =$$

$$\vec{E} = \begin{pmatrix} -40 \\ -80 \\ 0 \end{pmatrix}$$





$$\vec{A} \begin{pmatrix} 0 \\ x_A \\ 0 \end{pmatrix}$$

$$\vec{B} \begin{pmatrix} 0 \\ x_B \\ 0 \end{pmatrix}$$

$$\vec{G} \begin{pmatrix} 0 \\ -1000 \\ 0 \end{pmatrix}$$

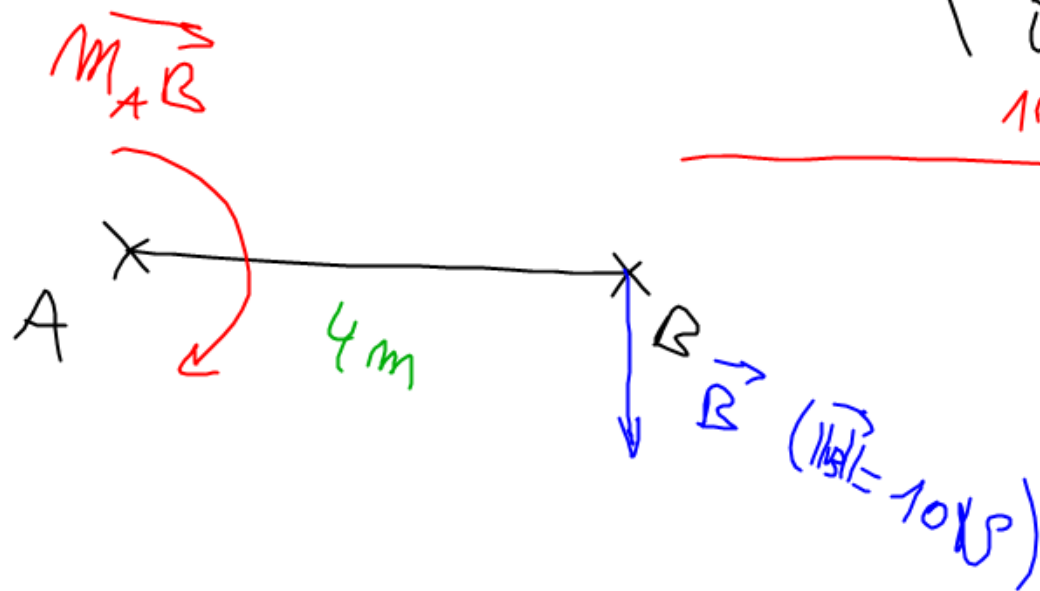
je sais que $x_A < 0$

unité moment d'une force: $N.m$

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$$M = \underbrace{F \cdot d}_{\perp}$$

$$\vec{F} \wedge \vec{d} = \begin{pmatrix} 10 & 2 & 0 \\ 0 & 1 & -1 \end{pmatrix} = \begin{pmatrix} 2 \cdot 0 - 0 \cdot 4 \\ 0 \cdot 5 - 10 \cdot 0 \\ 10 \cdot 4 - 2 \cdot 5 \end{pmatrix}$$



$$\begin{aligned} ||\vec{M}_{AB}|| &= 10 \cdot 4 \\ &= 40 \text{ N.m} \end{aligned}$$