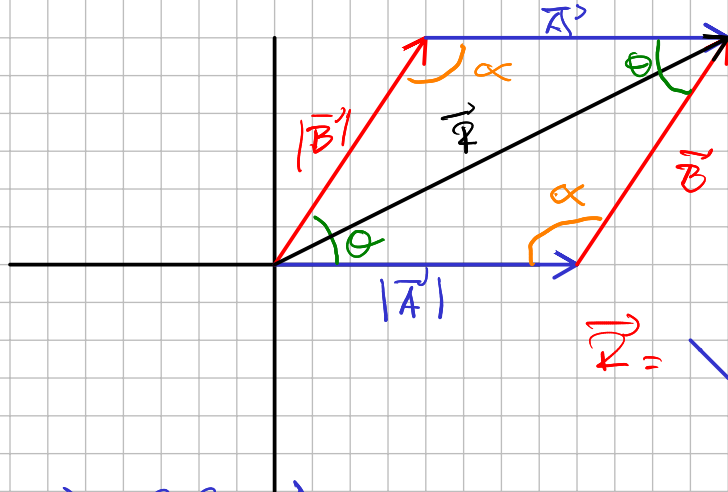




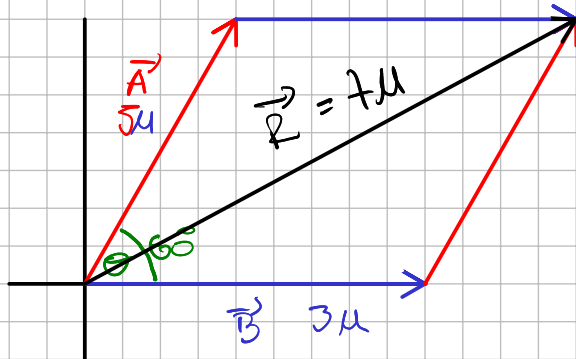
MODULO,
DIRECCION
SENTIDO
 $\vec{R} = \vec{A} + \vec{B}$

$$R = \sqrt{A^2 + B^2 + 2AB \cos \theta}$$

Suma $\neq 180^\circ$
 $\theta + \alpha = 360^\circ$

* DETERMINE EL MODULO DEL VECTOR

$\vec{A} = 5\mu$
 $\vec{B} = 3\mu$
 $\theta = 60^\circ$



$$|\vec{R}| = \sqrt{A^2 + B^2 + 2AB \cos \theta}$$

$$|\vec{R}| = \sqrt{5^2 + 3^2 + 2 \cdot 5 \cdot 3 \cos(60^\circ)}$$

$$|\vec{R}| = \sqrt{25 + 9 + 2 \cdot 5 \cdot 3 \cdot \frac{1}{2}}$$

$$|\vec{R}| = \sqrt{25 + 9 + 15}$$

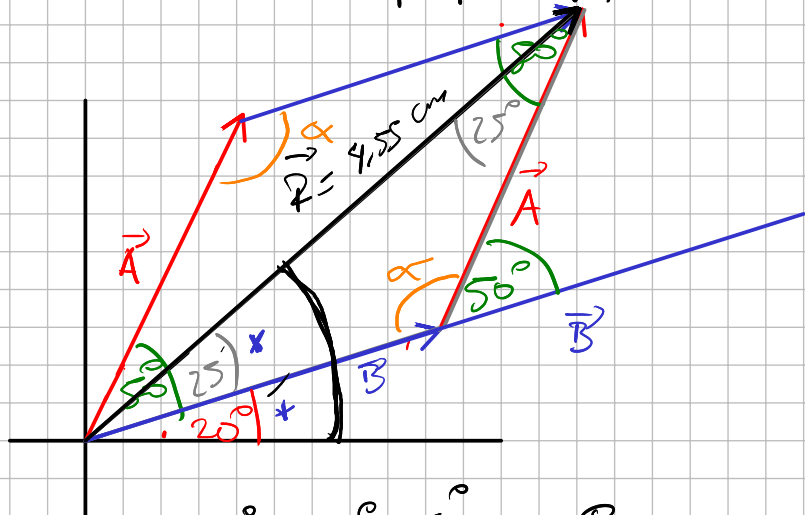
$$|\vec{R}| = \sqrt{49}$$

$$|\vec{R}| = 7\mu$$

SUMAR

$\vec{A} = 3\text{cm}, 70^\circ$
 $\vec{B} = 2\text{cm}, 20^\circ$

$\theta = 70^\circ - 20^\circ$
 $\theta = 50^\circ$
 $\alpha = 130^\circ$



$$360^\circ - 100^\circ = 260^\circ / 2$$

$$\alpha = 130^\circ$$

$$\alpha + \alpha + 50^\circ + 50^\circ = 360^\circ$$

$$2\alpha + 100^\circ = 360^\circ$$

$$2\alpha = 360^\circ - 100^\circ$$

$$2\alpha = 260^\circ$$

$$\alpha = \frac{260^\circ}{2}$$

$$\alpha = 130^\circ$$

$$180^\circ - 25^\circ - 25^\circ = 130^\circ$$

$$180^\circ - 50^\circ = 130^\circ$$

$$\vec{R} = \sqrt{(A^2 + B^2 + 2AB \cos(\theta))} \rightarrow (A+B)^2 + 2AB$$

$$\vec{R} = \sqrt{20,71}$$

$$\vec{R} = 4,55 \text{ cm}$$

$$\vec{R} = \sqrt{(A+B)^2 \cos \theta}$$

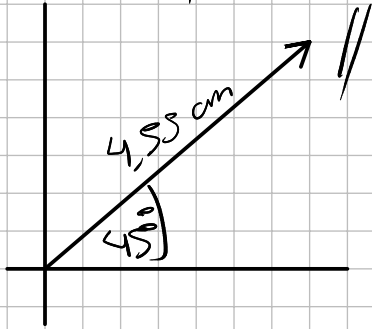
$$(A+B)(A+B)$$

$$A^2 + AB + AB + B^2$$

$$A^2 + 2AB + B^2 //$$

$$(A+B)^2 \cos(\theta) //$$

$$\vec{R} = 4,55 \text{ cm}, 45^\circ //$$



$$\vec{A} = 7 \text{ N}$$

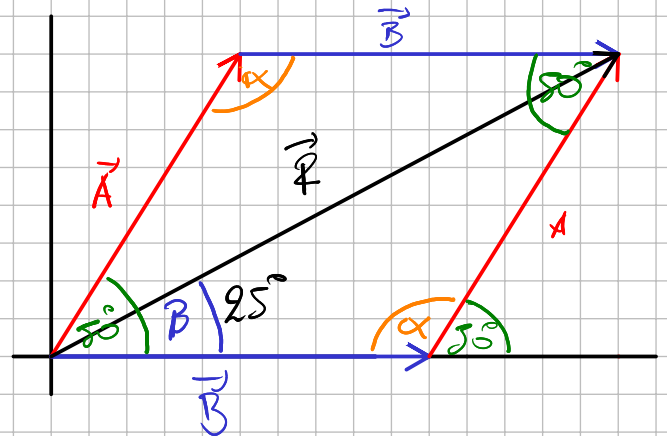
$$\vec{B} = 5 \text{ N}$$

$$\theta = 50^\circ$$

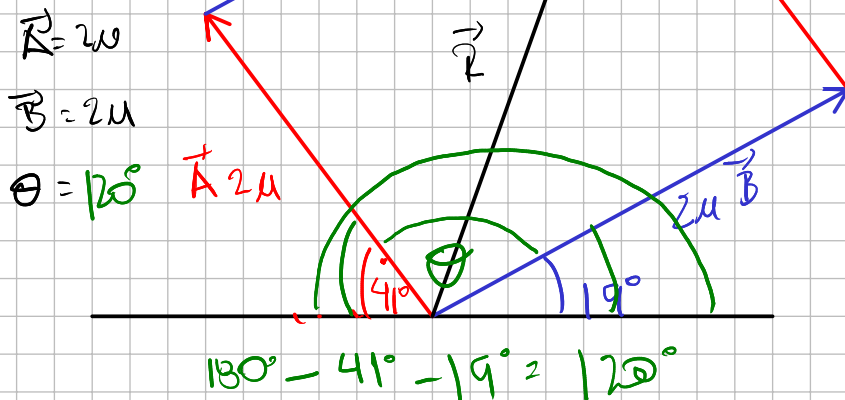
$$\vec{R} = 10,90 \text{ N}$$

$$\alpha = 130^\circ$$

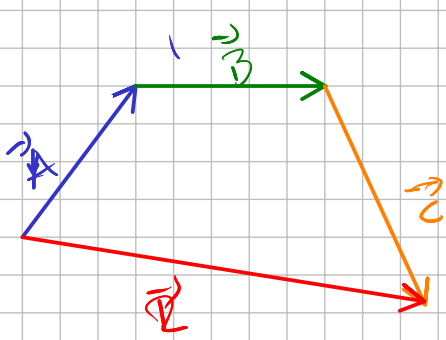
$$\beta = 25^\circ$$



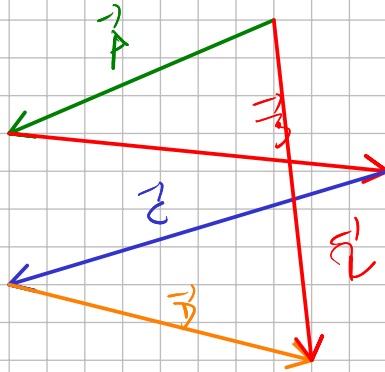
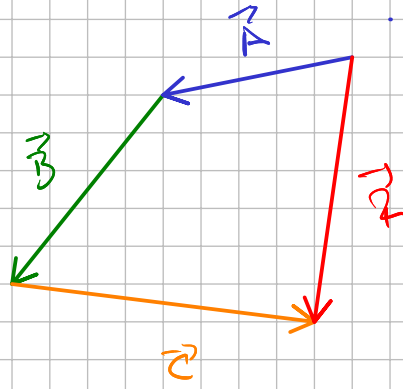
$$\vec{R} = 2 \mu //$$



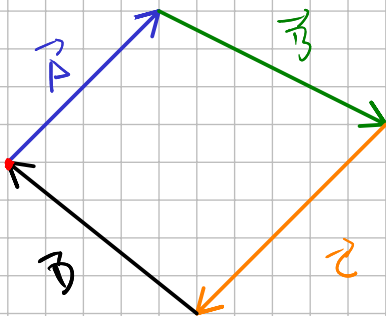
MÉTODO DEL POLÍGONO



$$\vec{R} = \vec{A} + \vec{B} + \vec{C}$$



CASOS ESPECIALES



$$\vec{R} = 0$$

TAREA

4 EJE METODO PARA VELOCIDADES

4/01/2024

9:39 PM //