

Übungen in AlgGeo \diamond Exercices en AlgGéo \diamond T. B1 \diamond II / 3

Probl. 1

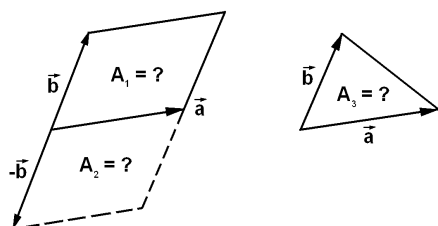
$$\begin{cases} 3x + 4y = 7 \\ \alpha \cdot x + 9y = 6 \end{cases}$$

(a) $\mathbb{L} = \{ \} \Rightarrow \alpha = ?$

(b) $\alpha = 2 \Rightarrow x, y = ?$

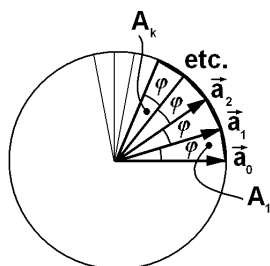
(c) $x = x(\alpha) = ?$

Probl. 2



$$\vec{a} = \begin{pmatrix} 5 \\ 2 \end{pmatrix}, \quad \vec{b} = \begin{pmatrix} 3 \\ 4 \end{pmatrix}$$

Probl. 3

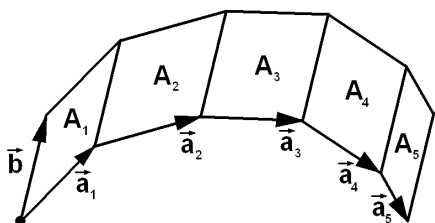


$$\vec{a}_0 = \begin{pmatrix} 10 \\ 0 \end{pmatrix}, \quad \varphi = \frac{\pi}{10}$$

$$\vec{a}_1 = ?$$

$$\sum_{k=1}^{20} A_k = A_1 + A_2 + \dots + A_{20} = ?$$

Probl. 4



$$\vec{b} = \begin{pmatrix} 1 \\ 4 \end{pmatrix}$$

$$\vec{a}_1 = \begin{pmatrix} 3 \\ 3 \end{pmatrix}, \quad \vec{a}_2 = \begin{pmatrix} 4 \\ 1 \end{pmatrix}, \quad \vec{a}_3 = \begin{pmatrix} 4 \\ 0 \end{pmatrix}$$

$$\vec{a}_4 = \begin{pmatrix} 3 \\ -2 \end{pmatrix}, \quad \vec{a}_5 = \begin{pmatrix} 1 \\ -2 \end{pmatrix}$$

$$\sum_{k=1}^5 A_k = A_1 + A_2 + \dots + A_5 = ?$$