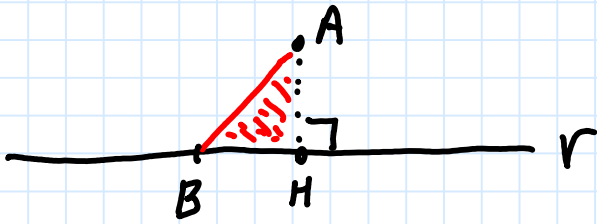


Ricevimento studenti - venerdì 9 febbraio 2024

Titolo nota

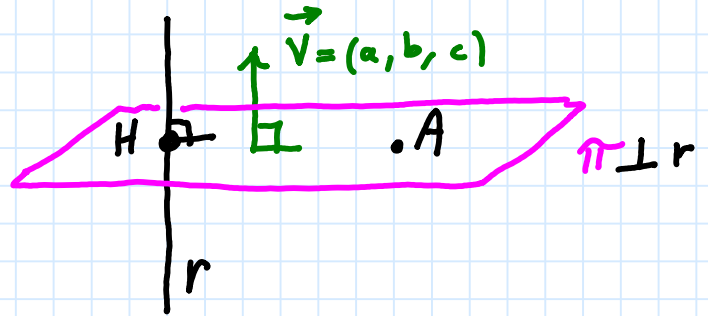
09/02/2024

$$A(2\sqrt{26}, 2, -5) \quad r: x = z + 7 = 0$$



$H = ?$

$$B? \rightarrow \text{area } \triangle AHB = 9\sqrt{3}$$



$$r: \begin{cases} x=0 \\ z+7=0 \end{cases} \quad // \text{asse } Y \quad (l, m, n) = \begin{pmatrix} 0 \\ 1 \\ 0 \end{pmatrix}$$

$$\pi: \overset{a}{0} \cdot (x - 2\sqrt{26}) + \overset{b}{1} \cdot (y - 2) + \overset{c}{0} \cdot (z - (-5)) = 0$$

$$\pi: y - 2 = 0$$

$$\{H\} = r \cap \pi: \begin{cases} x=0 \\ z+7=0 \\ y-2=0 \end{cases} \quad \begin{matrix} H(0, 2, -7) \\ A(2\sqrt{26}, 2, -5) \end{matrix}$$

$$d(A, H) = \sqrt{104 + 4} = \sqrt{108} = 6\sqrt{3}$$

$$B \in r: \begin{cases} x=0 \\ z+7=0 \end{cases} \quad \begin{matrix} B(0, \beta, -7) \\ H(0, 2, -7) \end{matrix}$$

$$d(B, H) = \sqrt{(\beta - 2)^2} = |\beta - 2|$$

$$\frac{1}{2} \cdot 6 \cdot \sqrt{3} \cdot |\beta - 2| = 9\sqrt{3}$$

$$3 \cdot \sqrt{3} \cdot |\beta - 2| = 9 \cdot \sqrt{3}$$

$$|\beta - 2| = 3 ; \quad \beta - 2 = \pm 3 ; \quad \beta = 2 \pm 3 \begin{matrix} \nearrow 5 \\ \searrow -1 \end{matrix}$$

$$B(0, 5, -7) ; \quad B'(0, -1, -7)$$
