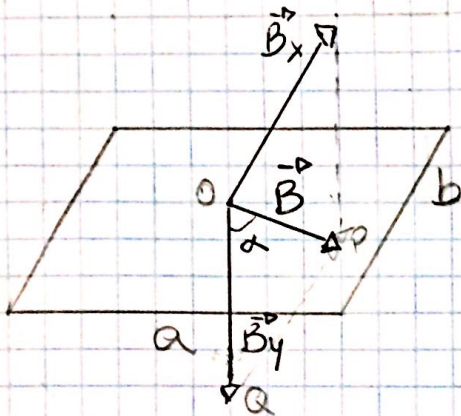


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$$a = 22 \text{ m}$$

$$b = 18 \text{ m}$$

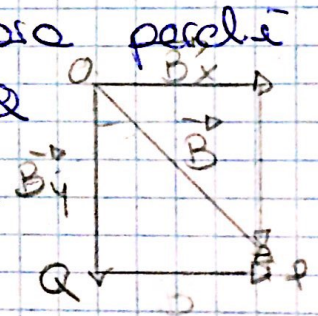
$$B_y = 4,2 \cdot 10^{-5} \text{ T (verso sud)}$$

$$B_x = 2,6 \cdot 10^{-5} \text{ T (verso nord)}$$

$$\alpha = 45^\circ$$

per trovare B applico il teorema di pitagora perché considero il triangolo rettangolo $P\hat{O}Q$

$$B = \sqrt{B_x^2 + B_y^2} = \sqrt{(2,6 \cdot 10^{-5} \text{ T})^2 + (4,2 \cdot 10^{-5} \text{ T})^2} = 4,9 \cdot 10^{-5} \text{ T}$$



dunque $B_y = B \cos \alpha \Rightarrow \alpha = \arccos \frac{B_y}{B} = \arccos \frac{4,2 \cdot 10^{-5} \text{ T}}{4,9 \cdot 10^{-5} \text{ T}} = 31^\circ$

$$\Phi(\vec{B}) = \vec{B} \cdot \vec{A} = B \cdot A \cdot \cos \alpha =$$

$$= (4,9 \cdot 10^{-5} \text{ T}) (22 \text{ m} \times 18 \text{ m}) \cos(31^\circ) =$$

$$= 1,7 \cdot 10^{-2} \text{ T} \cdot \text{m}^2 \Rightarrow 1,7 \cdot 10^{-2} \text{ Wb}$$