

$$F_{q_2 \rightarrow q_1} = 9 \times 10^9 \frac{6.88 \times 10^{-12}}{0.0324} \Rightarrow F_{q_2 \rightarrow q_1} = 1.91 \text{ [Nt]} \quad (2)$$

Η συνιστώσα x της $F_{q_2 \rightarrow q_1}$ είναι ίση με:

$$F_{q_2 \rightarrow q_1, x} = F_{q_2 \rightarrow q_1} \sin \phi \quad \left. \begin{array}{l} \phi = \pi/4 \end{array} \right\} \Rightarrow F_{q_2 \rightarrow q_1, x} = (0.707)(2.21)$$

$$\Rightarrow F_{q_2 \rightarrow q_1, x} = 1.56 \text{ [Nt]} \quad (3)$$

Η συνιστώσα y της $F_{q_2 \rightarrow q_1}$ είναι ίση με:

$$F_{q_2 \rightarrow q_1, y} = F_{q_2 \rightarrow q_1} \cos \pi/4 = 1.56 \text{ [Nt]} \quad (4)$$

Από εκείνη τη στιγμή:

$$\Sigma F_y = (1.56 + 1.91) \text{ [Nt]} \Leftrightarrow \Sigma F_x = 3.47 \text{ Nt}$$

$$\Sigma F_x = 1.56 \text{ Nt}$$

$$F_{\text{syn}} = \sqrt{(1.56)^2 + (3.47)^2} = \sqrt{(2.43) + (12.059)} \Leftrightarrow$$

$$\Rightarrow \boxed{F_{\text{syn}} = 3.8 \text{ Nt}}$$

$$\tan \theta = \frac{\Sigma F_x}{\Sigma F_y} = \frac{1.56}{3.47} = 0.45 \Rightarrow \theta =$$