Answer on Question 38513, Physics, Electromagnetism

The field created by point charge is $\vec{E}=\frac{k\,q}{R^3}\vec{R}$, $k=8.99\cdot10^9\,\frac{N\cdot m^2}{C^2}$.

Charge q_2 is at $(1;4)$, observation point is $(1;0)$. Thus, radius vector is $(0;-4)$.

Hence, at point $(1;0)$ charge q_2 creates field $\vec{E}_2=(0;-\frac{k|q_2|}{4^2})=(0;-1.85\cdot10^9\frac{V}{m})$.

Charge q_1 is at $(-3;0)$ hence radius vector is $(4;0)$. Thus, at point $(1;0)$ charge q_1 creates field $\vec{E}_1=(\frac{k|q_1|}{4^2};0)=(1.18\cdot10^9\frac{V}{m};0)$.

The net field is $\vec{E}=\vec{E}_1+\vec{E}_2=(1.18\cdot10^9\frac{V}{m};-1.85\cdot10^9\frac{V}{m})$ ($E_x=1.18\cdot10^9\frac{V}{m}$, $E_y=1.85\cdot10^9\frac{V}{m}$).