The electric field at a point in space from a point charge is given by

$$E = k\frac{q}{r^2}$$

So,

$$E_1 = k\frac{q_1}{{r_1}^2} \qquad E_2 = k\frac{q_2}{{r_2}^2}$$

Then

$$E = E_1 + E_2 = k\frac{q_1}{{r_1}^2} + k\frac{q_2}{{r_2}^2} = k(\frac{q_1}{{r_1}^2} + \frac{q_2}{{r_2}^2}\ )$$

$$E = 9 * 10^9\left(\frac{-5 * 10^9}{1^2} + \frac{6 * 10^9}{1.5^2}\ \right) = -9\ (\frac{N}{C})$$

So, net field is 9 N/C and directed along the positive side of x-axis