8. In the figure shown below, the point X is located midway between the two charges. The charges are 4 m apart. Calculate the magnitude and direction of the electric field at X. Use $k = 9 \times 10^9$ N.m$^2$/C$^2$ (10 pts)

\[+3 \times 10^{-6} \text{ C} \quad \times \quad -3 \times 10^{-6} \text{ C}\]