58. The field of each charge has magnitude

$$E = k\,\frac{e}{(0.020\,\mathrm{m})^2} = 3.6 \times 10^{-6}\ \mathrm{N/C}\ .$$

The directions are indicated in standard format below. We use the magnitude-angle notation (convenient if one is using a vector capable calculator in polar mode) and write (starting with the proton on the left and moving around clockwise) the contributions to $\vec{E}_{\mathrm{net}}$ as follows:

$$(E \angle -20^\circ) + (E \angle 130^\circ) + (E \angle -100^\circ) + (E \angle -150^\circ) + (E \angle 0^\circ)\ .$$

This yields $(3.93 \times 10^{-6} \angle -76.4^\circ)$, with the N/C unit understood.