

6. (a) $E = F/e = (3.9 \times 10^{-15} \text{ N})/(1.60 \times 10^{-19} \text{ C}) = 2.4 \times 10^4 \text{ N/C}$.
(b) $\Delta V = E\Delta s = (2.4 \times 10^4 \text{ N/C})(0.12 \text{ m}) = 2.9 \times 10^3 \text{ V}$.