

59. We use $q = 1.37 \times 10^5 \text{ C}$ from Sample Problem 22-7 and $k = 1/4\pi\epsilon_0$ to find the potential:

$$V = \frac{q}{4\pi\epsilon_0 R_e} = \frac{(1.37 \times 10^5 \text{ C}) \left(8.99 \times 10^9 \frac{\text{N}\cdot\text{m}^2}{\text{C}^2} \right)}{6.37 \times 10^6 \text{ m}} = 1.93 \times 10^8 \text{ V} .$$