30.27. **Visualize:** Please refer to Figure Ex30.27.

Solve: Any two electrodes, regardless of their shape, form a capacitor whose capacitance is defined as $C = Q/\Delta V_C$.

The capacitance is

$$C = \frac{20 \times 10^{-9} \text{ C}}{100 \text{ V}} = 2.0 \times 10^{-10} \text{ F} = 200 \text{ pF}$$