

# Calculating Capacitance?

- $C = f(\text{geometry}, \text{dielectric})$ 
  - e.g.  $C = \epsilon \text{Area} / \text{separation} = \epsilon A / d$  for a parallel-plate capacitor
- With much symmetry,  $C$  can be calculated
  - And capacitors are often manufactured in simple geometries!
- Without such symmetry – approximation and estimation is necessary
  - Can be made arbitrarily accurate
  - Remember Laplace and field plotting?
- Tackle calculation, then estimation