Homework and Project: ECE 5/6340
FINITE DIFFERENCE (FD) METHOD

Symmetry and SOR

2 (from last time) Repeat with symmetry. Do problem 3.13 in the text. Use symmetry. Solve the Matrix equation with SOR

3.13 For a long hollow conductor with a uniform U-shape cross section shown in Figure 3.50, find the potential at points A, B, C, D, and E.

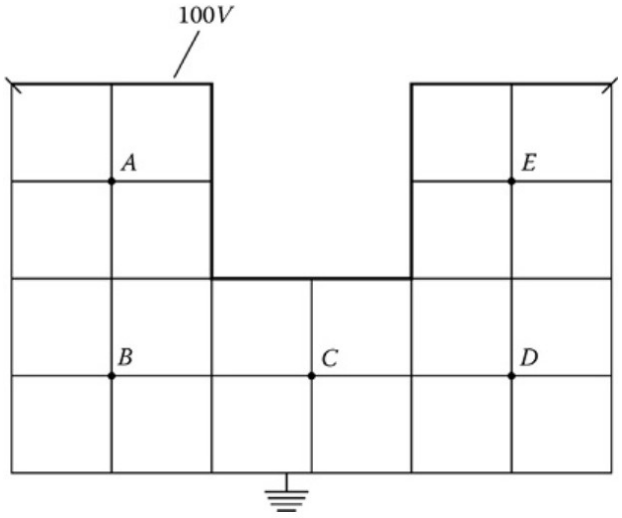
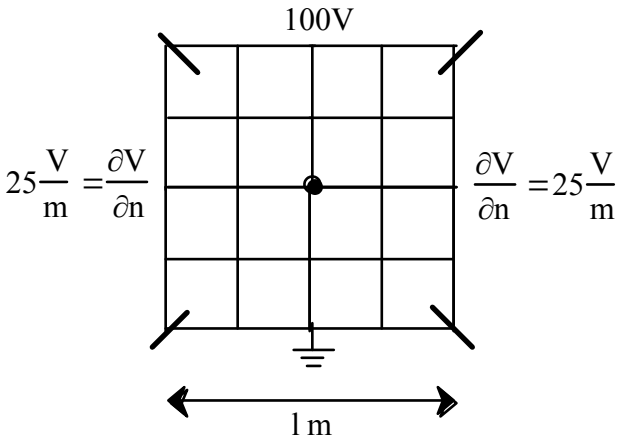


FIGURE 3.50
For Problem 3.13.

Boundary Conditions & Symmetry

4. Find the potential at the center. Let h = 0.25 m



5. Find the potential at the center