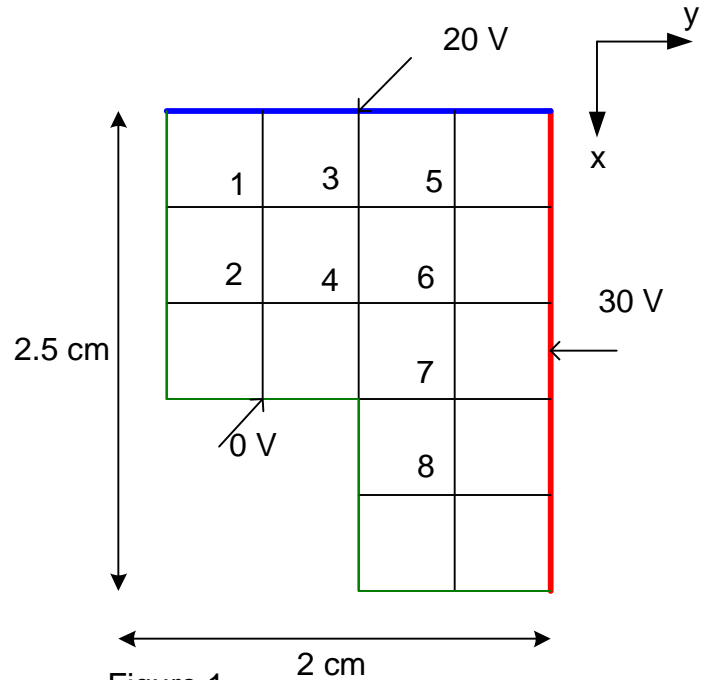


EE351: Homework # 9
Due 12/7/2005

Problem 1:

Determine the potential at the interior points of the system shown Figure 1. All green boundaries are at 0 V, blue at 20 V, and red at 30 V.

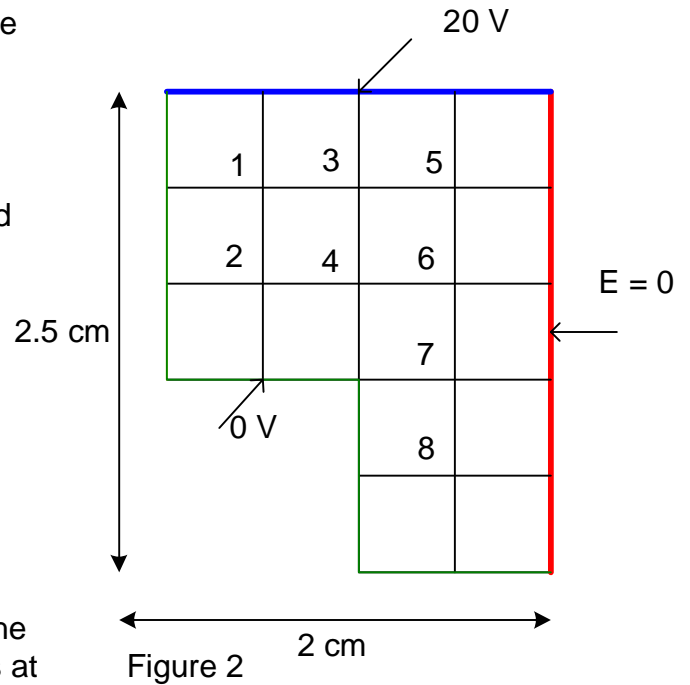
- Determine potential at the end of iteration 1.
- the converged solution, assume 0.001 coverage criterion. (hint write a matlab code and use iterative approach).
- Set up the matrix equation for direct solution approach.



Problem 2:

Determine the potential at the interior points of the system shown Figure 2. All green boundaries are at 0 V and blue at 20 V. The electric field is zero along the red line.

- Determine potential at the end of iteration 1.
- the converged solution, assume 0.001 coverage criterion. (hint write a matlab code and use iterative approach).
- Set up the matrix equation for direct solution approach.



Problem 3:

Determine the potential at the interior points of the system shown Figure 3. The green boundary is at 0 V and blue at 16 V.

- Determine potential at the end of iteration 1.
- the converged solution, assume 0.001 coverage criterion. (hint write a matlab code and use iterative approach).
- Set up the matrix equation for direct solution approach.

