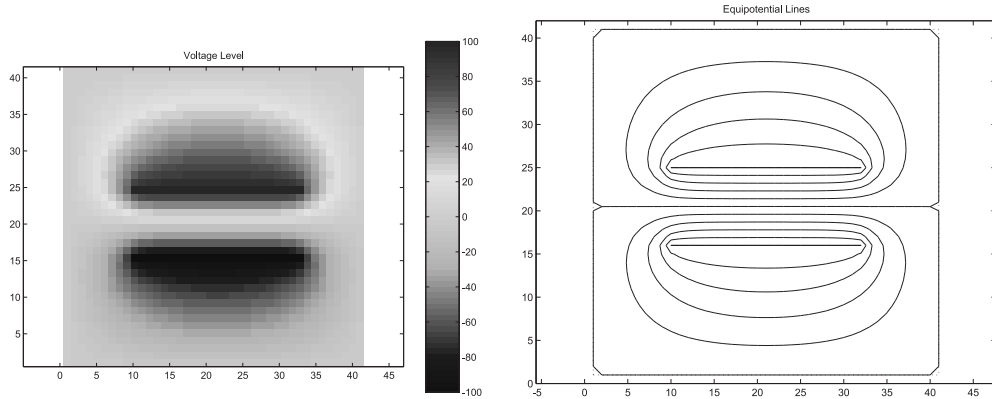


# ECE 3025 Homework 9: Laplace's Equation

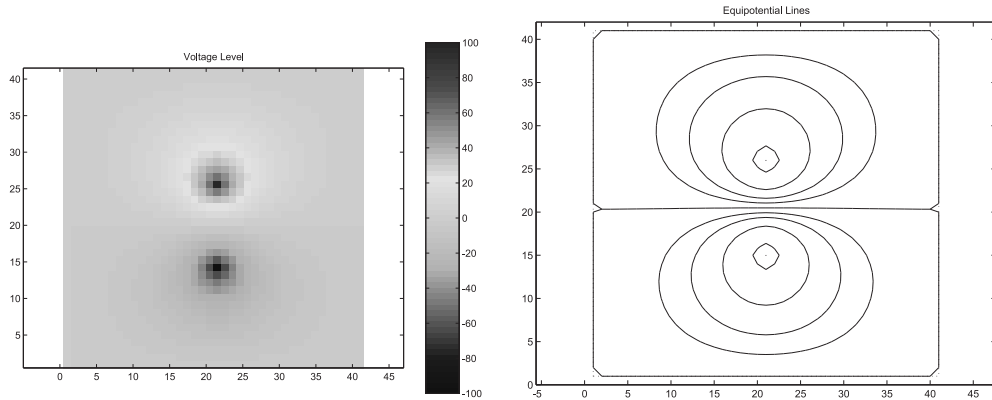
## Solutions

1. Below are the voltage maps and equipotential lines for the 4 cases discussed. The streamlines/field lines that the students choose to draw will be varied. The only key rules: a) they must begin and end on charges, b) they must point from positive to negative voltage, c) they must always intersect the equipotential lines at a right angle. Make sure all equipotential lines are labeled as well.

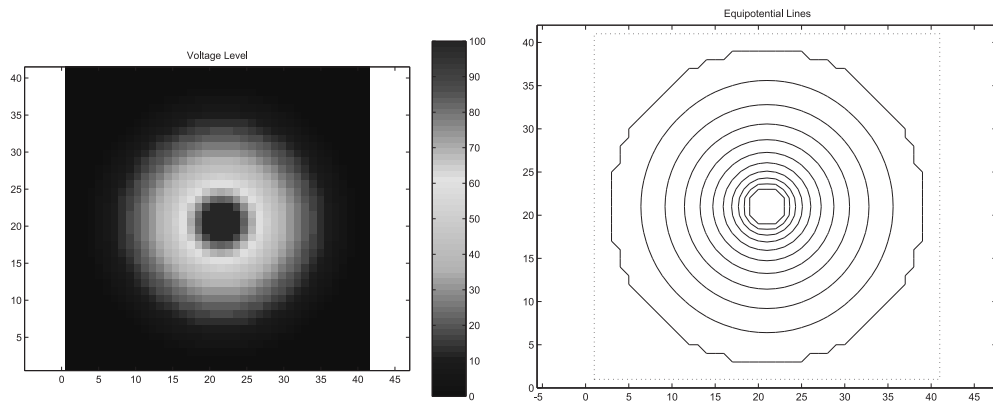
(a) Graphs for the parallel plates:



(b) Graphs for the two line conductors:



(c) Graphs for the coaxial line:



(d) Graphs for the microstrip line:

