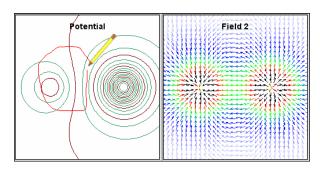
Worksheet for Exploration 25.2: Electric Field Lines and Equipotentials



The panel on the left displays an equipotential plot.

a. What is an equipotential line?

- b. How are electric field lines (vectors shown) related to equipotential lines?
 - i. Describe qualitatively, the work required to move a positive test charge along an equipotential.
 - ii. along a E field line.

- c. Draw the electric field lines for this potential by dragging the pencil (at its tip) after clicking the *draw on* button. Use the print screen function on your computer to print out a copy of your drawing.
 - i. Cut and paste it here or make a good sketch.

d.	After you have made your drawing, determine which electric field (1, 2, 3, or 4) best represents the region. Explain your choice. Note, the arrows in the field plot represent the direction and the colors represent the magnitude of the electric field.
e.	Was your drawing a good representation of the actual field? Did you have any misunderstandings? Explain.