## **Quiz – Voltage and Electric Fields**

April 8, 2011

- This is a closed book and closed note examination.
- · Show all work and thoughts!

Two metal plates are placed parallel to each other and are separated by 10 cm. One plate is held at a voltage of 20 V and the other plate is held at 120 V.

1. Draw three voltage lines between the two plates. Identify the voltage for the line in the middle of the plates.



2. Draw the electric field lines between the two plates. Determine the magnitude (and direction) of the electric field in the middle of the plates.



Quiz 1