

Name: \_\_\_\_\_

1. Define electric potential. State the units. (15 pts)

2. What is an equipotential surface? (20 pts)

3. Define electric field. State the units (both that are listed in the text). (20 pts)

4. Complete the statement: Electric field lines are always \_\_\_\_\_ to equipotential surfaces. (10 pts)

5. Calculate the electric field strength of the following arrangement. Assume the leads are 1.00 cm apart and the electric potential difference measured with the voltmeter is 0.673 V. Refer to the procedure. (20 pts)

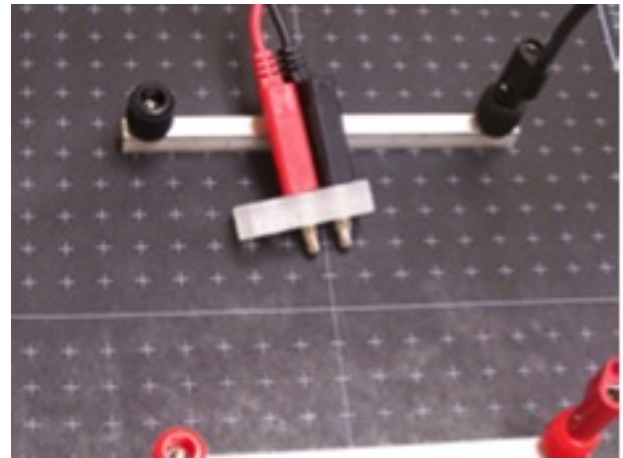


Figure 14.5: Electric Field Strength Arrangement