King Fahd University of Petroleum & Minerals

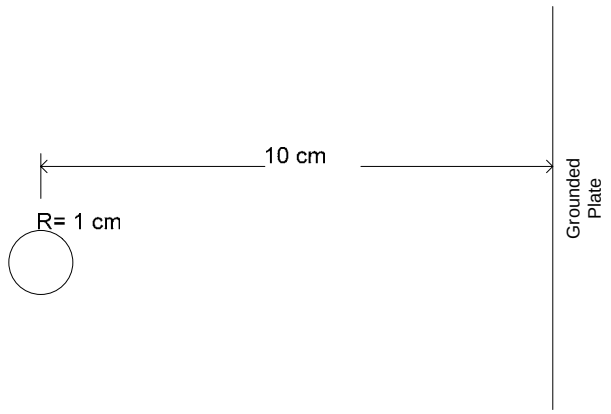
Electrical Engineering Department

EE 620: High Voltage Engineering

(First Semester 051)

Project # 2

A sphere of radius 1 cm is located at a distance of 10 cm from an earthed plate as shown in the figure. The sphere is stressed by 1 kV.

a) Apply the method of successive imaging to evaluate the distribution of the electric field along the gap axis.

b) Plot the electric field and potential along the gap axis.