

KING FAHD UNIVERSITY OF PETROLUIM AND MINERALS
DEPARTMENT OF PHYSICS
ELECTRICITY AND MAGNETISM I
PHYS 305
SPRING 2007
HOME WORK # 2
DUE DATE (9/3/2008)

PROF. I. NASSER

- 1- Calculate the surface and volume elements in spherical and cylindrical coordinates.
- 2- Calculate the Laplacian operator in spherical and cylindrical coordinates.
- 3- Solve: 1-36, 38, 41, 42(a, c), 43, and 44.