Homework 10 for September 15 2008
        Due 8AM on September 16 2008
Physics 221 with Professor Jeff Terry

1. A uniform electric field $a\hat{i} + b\hat{j}$ intersects a surface of area A. What is the flux through this surface if it lies: (a) in the yz plane, (b) in the xz plane, (c) in the xy plane?

2. At the surface of a sphere, of radius r, the electric field magnitude is E and it is pointing out of the sphere perpendicular to the surface. How much charge is enclosed by the sphere?