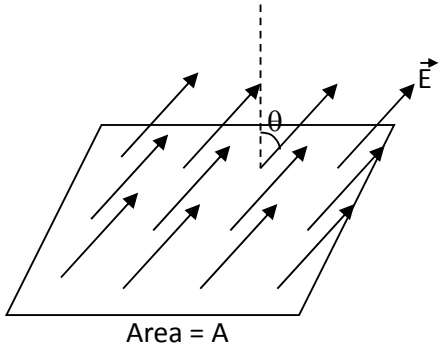
Name: _____ Sec: _____

PHY 232 Fall 2014 Supplementary Work (will not be collected)

Class 6. Flux and Gauss's Law

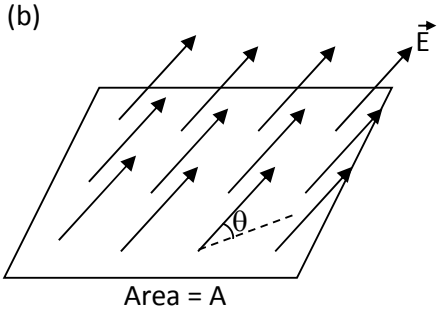
Write down the electric flux through the surface for each of the following casses:

(a) Perpendicular to flat area



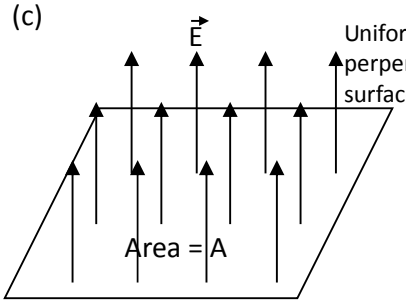
$\Phi_E =$ $|\vec{E}|\, A \cos\theta$

(b)



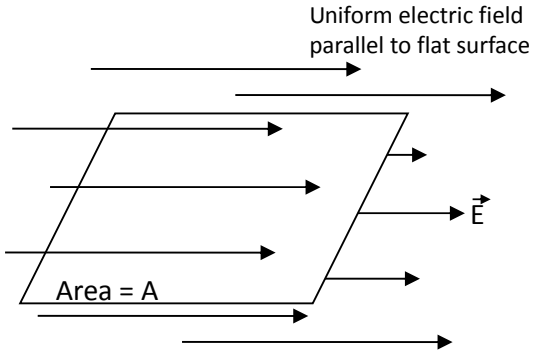
$\Phi_E =$ $|\vec{E}|\, A \sin\theta$

(c)



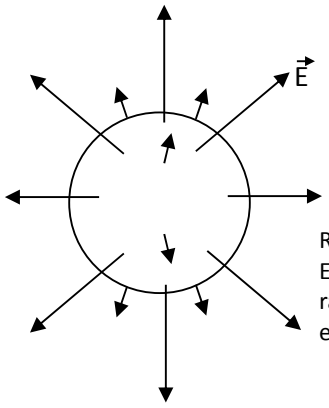
$\Phi_E =$ $|\vec{E}|\, A$

(d)



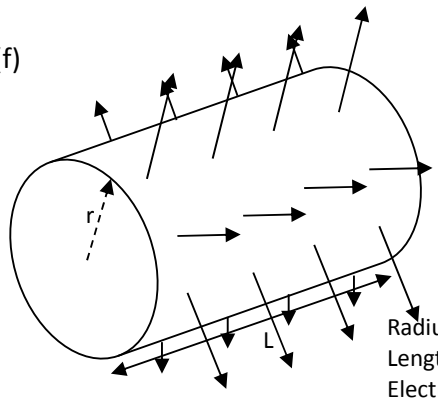
$\Phi_E =$ 0

(e)



$\Phi_E =$ $|\vec{E}| \cdot 4\pi r^2$

(f)



$\Phi_E =$ $|\vec{E}| \cdot 2\pi r L$