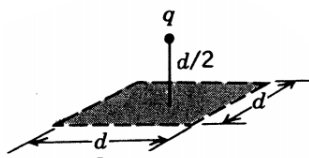


Name:

Physics 51
Homework #3
September 8, 2016

27-E7, 27-E8

27-E7 A point charge $+q$ is a distance $d/2$ from a square surface of side d and is directly above the center of the square as shown in Fig. 24. Find the electric flux through the square. (Hint: Think of the square as one face of a cube with edge d .)



■

27-E8 A butterfly net is in a uniform electric field E as shown in Figure 27-27. The rim, a circle of radius a , is aligned perpendicular to the field. Find the electric flux through the netting, relative to the outward normal.

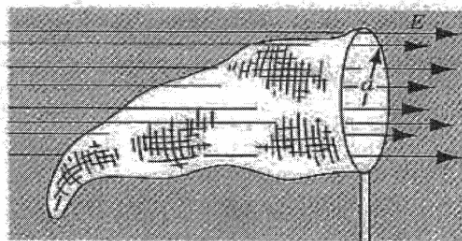


FIGURE 27-27. Exercise 8.