

(2pts) 1.

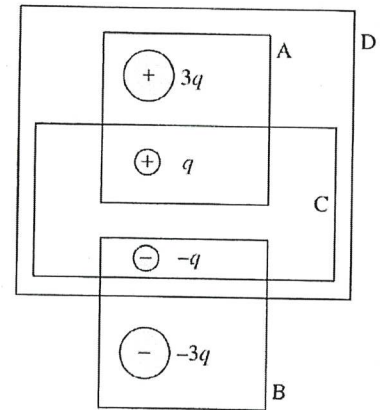
What is the electric flux through each of these surfaces?  
Give your answers as multiples of  $q/\epsilon_0$ .

$$\Phi_A = 4q/\epsilon_0$$

$$\Phi_B = -4q/\epsilon_0$$

$$\Phi_C = 0$$

$$\Phi_D = 3q/\epsilon_0$$



$$\Phi = \frac{Q_{in}}{\epsilon_0}$$

$$Q_{in,A} = 4q$$

$$Q_{in,B} = -4q$$

$$Q_{in,C} = 0$$

$$Q_{in,D} = 3q$$