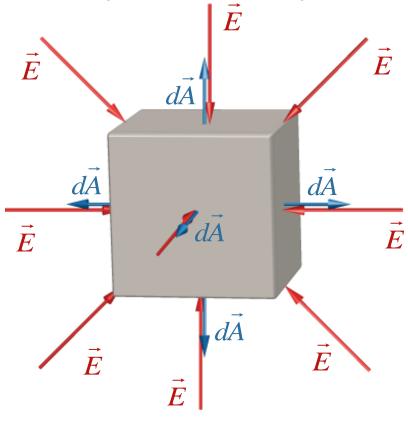
## **Direction Matters:**

Can flux through a flat plane be negative? What would that represent?



For a closed surface,  $d\vec{A}$  points outward

$$\Phi_S = \int_S \vec{E} \cdot d\vec{A} < 0$$