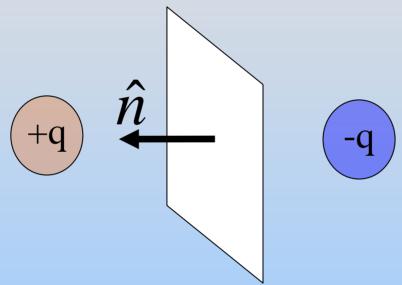
Concept Question: Flux

The electric flux through the planar surface below (positive unit normal to left) is:

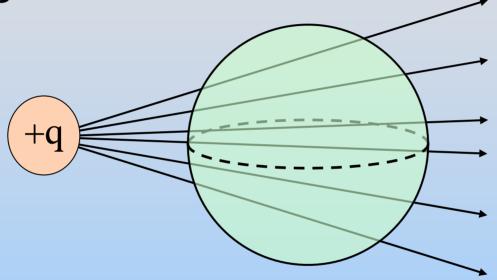


- 1. positive.
- 2. negative.
- 3. zero.
- 4. I don't know

Concept Question: Flux thru Sphere

The total flux through the below spherical

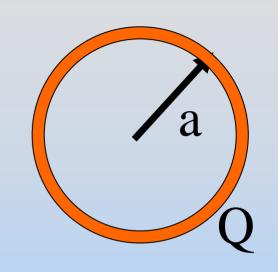
surface is



- 1. positive (net outward flux).
- 2. negative (net inward flux).
- 3. zero.
- 4. I don't know

Concept Question: Spherical Shell

We just saw that in a solid sphere of charge the electric field grows linearly with distance. Inside the charged spherical shell at right (r<a) what does the electric field do?



- 1. Constant and Zero
- 2. Constant but Non-Zero
- 3. Still grows linearly
- 4. Some other functional form (use Gauss' Law)
- 5. Can't determine with Gauss Law

Concept Question: Slab of Charge

Consider positive, semi-infinite (in x & y) flat slab z-axis is perp. to the sheet, with center at z = 0.

At the plane's center (z = 0), **E**



- 1. points in the positive z-direction.
- 2. points in the negative z-direction.
- 3. points in some other (x,y) direction.
- 4. is zero.
- 5. I don't know

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8.02SC Physics II: Electricity and Magnetism

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