

Gauss' Law

1. The electric flux through a Gaussian surface is $565 \text{ N m}^2 \text{ C}^{-1}$. Find the enclosed charge.

Gauss' Law with a spherical conductor

2. A conducting sphere ($R = 5 \text{ m}$) has a net charge of 10 nC . Calculate the E field:
- Inside of the sphere ($r < R$)
 - Outside of the sphere ($r > R$)
 - Sketch a plot of E vs. r