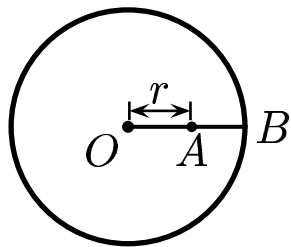


Consider a conducting sphere with a radius R , and charge Q . It is in electrostatic equilibrium.



Find the potential V_A at A , $\overline{OA} = r < R$, and the potential V_O at O .

- A) $V_A = k \frac{Q}{r}$ and $V_O = \infty$.
- B) $V_A = 0$ and $V_O = 0$.
- C) $V_A = k \frac{Q}{R}$ and $V_O = k \frac{Q}{R}$.
- D) $V_A = k \frac{Q}{R}$ and $V_O = \infty$.

Being inside of an equipotential body, $V_O = V_A = V_B = \frac{kQ}{R}$.

Answer **C**.