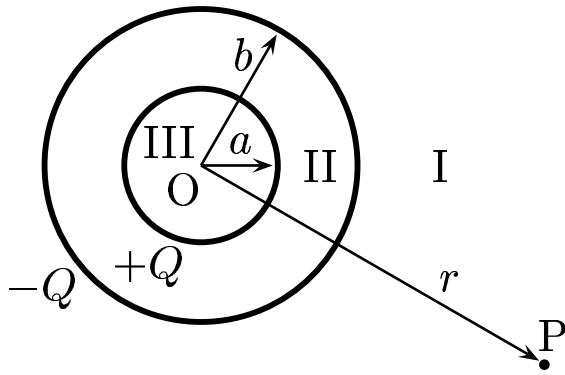


Given: Two thin concentric conducting spherical shells with charges Q and $-Q$ on the inner and outer shells respectively.



Find V at P in region I, which is a distance \mathbf{r} from O .

- A) $V = k \frac{Q}{r}$
- B) $V = 0$
- C) $V = -k \frac{Q}{r}$
- D) none of the above

In region I, using the superposition principle,

$$V = V_{inner} + V_{outer} = k \frac{Q}{r} - k \frac{Q}{r} = 0.$$

Answer **B**.