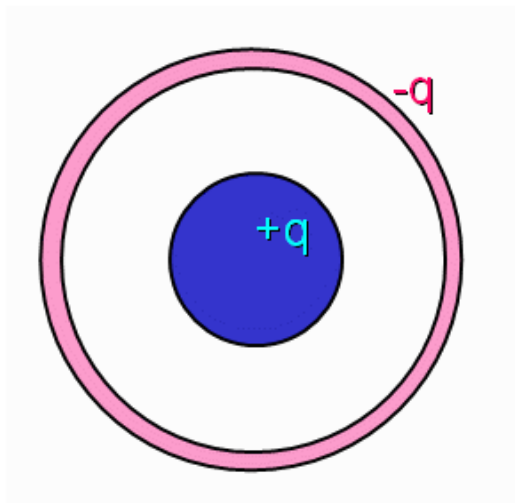


# CheckPoint 3.1



4) A positively charged solid conducting sphere is contained within a negatively charged conducting spherical shell as shown. The magnitude of the total charge on each sphere is the same.



What is direction of field between blue and red spheres?

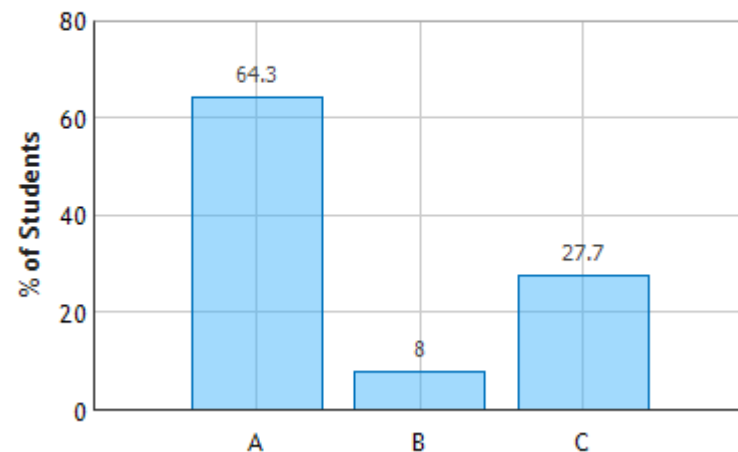
- The field point radially outward     The field point radially inward     The field is zero

A) Outward

B) Inward

C) Zero

Charged Conducting Sphere and Spherical Shell: Question 1 (N = 860)



**Careful:** what does **inside** mean?  
This is always true for a solid conductor  
(within the material of the conductor)  
**Here we have a charge "inside"**

“The field points from the positive charge to the negative charge.”

“It must point inward to cancel out the field outward due to the charge inside the shell to completely cancel out the e-field inside the shell”

“The fields cancel out.”