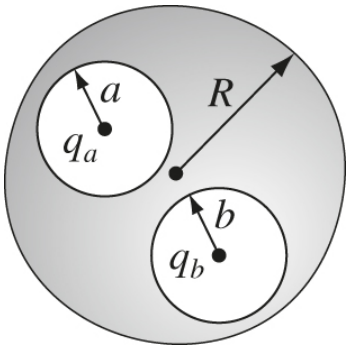
PHYSICS 301 Tutorial #5 – quiz Name: _____
October 5, 2024 Student Number: _____

(1pt) **1.** The figure below shows a spherical *conductor* with two cavities. One cavity contains point charge q_a and the other contains point charge q_b. If the conductor carries a net charge of Q (not including the point charges in the cavities), what is the charge on the *outer surface* of the conductor?



(1pt) **2.** This problem uses the same figure shown in problem 1. If $q_a > q_b$ and $a = b$, how does the potential V_a on the wall of cavity-a compare to the potential V_b on the wall of cavity-b?

2 pts