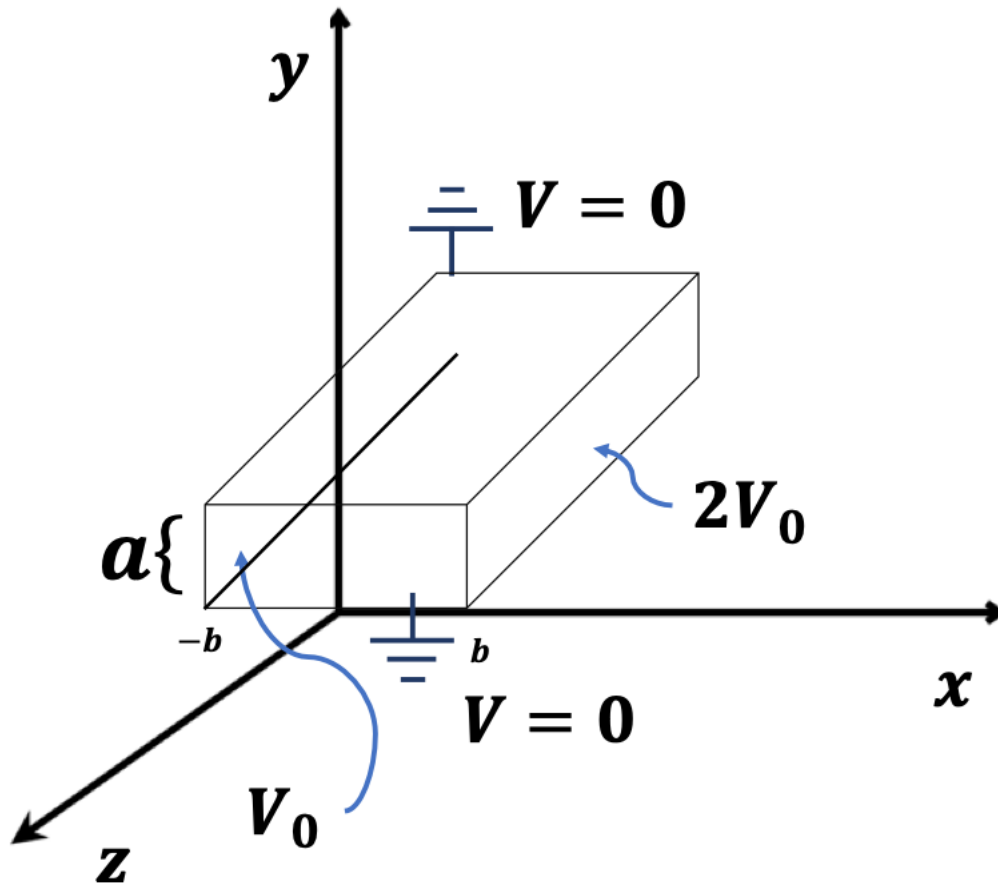
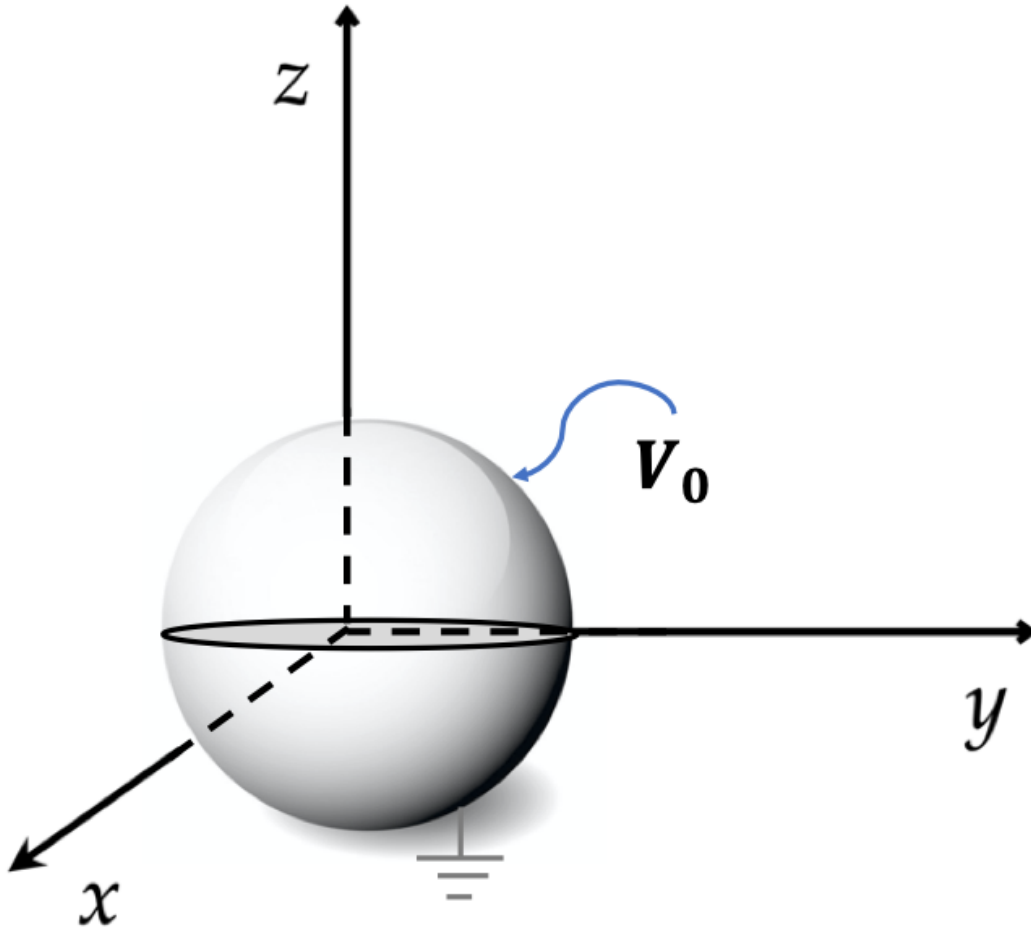


Phys331/Homework #3
Due on Monday 30/5/2022

- 1) Two infinitely long grounded metal plates, again at $y = 0$ and $y = a$, are connected at $x = \pm b$ by metal strips maintained at a constant potential V_0 and $2V_0$, respectively. Find the potential inside the resulting rectangular pipe



2) A sphere of radius R divided into two hemispheres by a horizontal plane. The upper hemisphere is maintained at potential V_0 , while the lower hemisphere is maintained at zero potential. Find the potential outside and inside the sphere.



Please also solve the following problems from the textbook: 32/94, 36/97, 47/108, 50/108 and 61/112