PhyzJob: Electric Field Graphing

Make a data table, then plot the strength of the electric field vs. the distance from the spherical charges shown below. *Hint: the field is symmetrical around the charge and the sphere itself is a conductor*.



Suppose the graph represented a small track on which a marble could roll. If a marble were placed on the graph 30 mm away from the center of the charge and released, which way would it roll?

How does this compare to the motion of a free proton placed 30 mm from the center of the spherical charge?

What would an electron placed 30 mm from the spherical charge do if released?

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