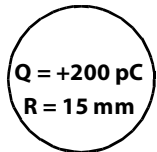


PhyzJob: Electric Potential Graphing

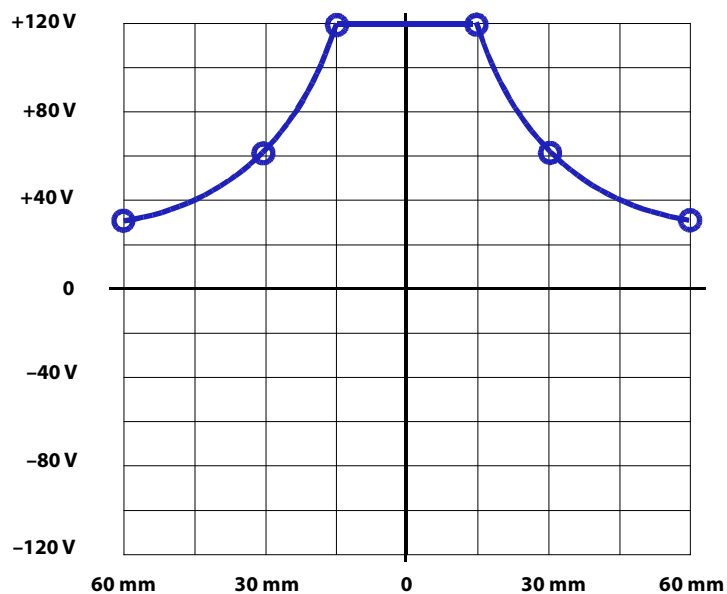


Make a data table, then plot the electric potential vs. the distance from the spherical charges shown below. *Hint: the potential is symmetrical around the charge, and the sphere itself is a conductor.*

d (mm)	V (V)
15	+120
30	+60
60	+30



Equation you used to find V:
 $V = kQ/d$



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?

Away from the charge.

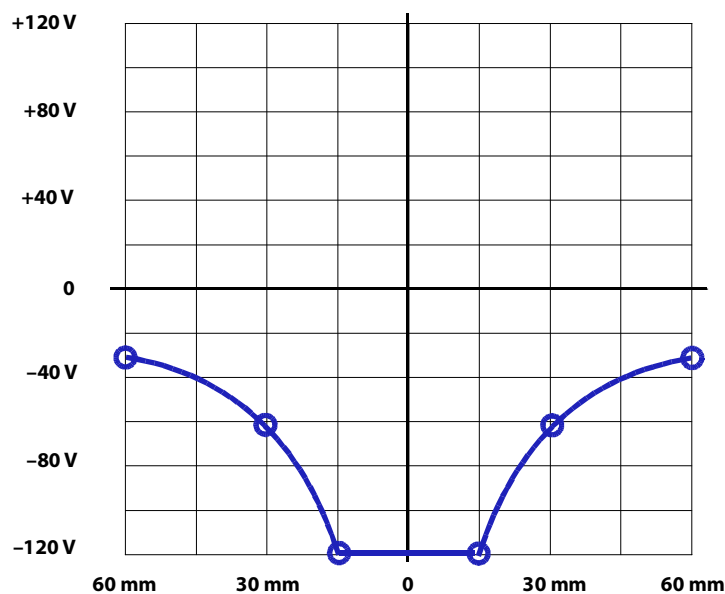
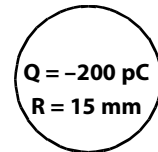
How does this compare to the motion of a free proton placed 30 mm from the center of the spherical charge?

They correspond/agree.

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

Move away from the charge.

d (mm)	V (V)
15	-120
30	-60
60	-30



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?

Toward the charge.

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

They correspond/agree.

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

Move toward the charge.