Name:_____

Grade and Section:_____Date:_____

EXERCISES ON ELECTRIC POTENTIAL

1. A point charge has a charge of 8.00×10^{-11} C. At what distance from the point charge is the electrical potential (a) 12.0 V? (b) 24.0 V?

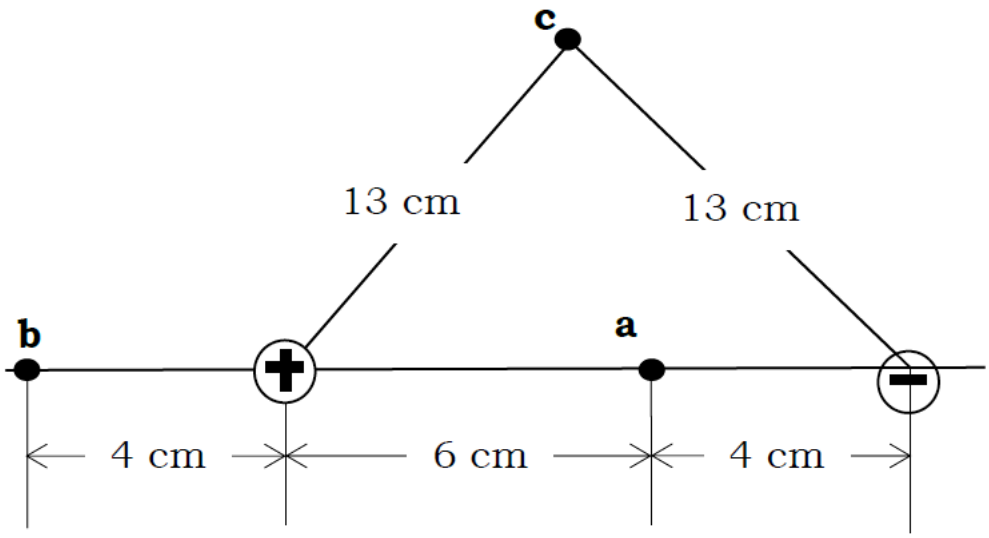
GIVEN:

REQUIRED:

SOLUTION:

2. An electric dipole consists of point charges, q1 = +12 nC and q2 = -12 nC placed 10.0 cm apart. Compute the electric potentials at points a, b and c.

Hint: use the electric potentials for several point charges



GIVEN:

REQUIRED:

SOLUTION:

3. How much work is needed to decreases the distance between a +15 μC charge and a -20 μC charge from 1 m to 0.25 m?

GIVEN:

REQUIRED:

SOLUTION: