Name_____ Period _____ Date_____

Quiz 11:3D Electrostatic Potential

3.2×10^{-19}C

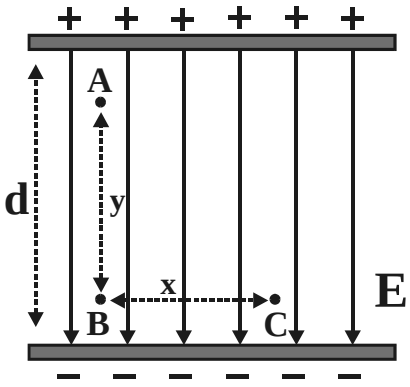
$1.0\ nm = 10^{-9}m$
$k = 9.00 \times 10^{9}\ Nm^2/C^2$
$q_e = -1.60 \times 10^{-19}C$

1. What will be the electrostatic potential at point B in diagram above? [3 pts]

2. What will be the potential difference between points B and A? [3 pts]

3. How much work would be required to move an electron from point A to point B? [3 pts]

Two horizontal, parallel plates are arranged as shown to the right. The distance between the two plates is d = 8.50cm while points A and B are y = 6.00cm apart and points B and C are x = 5.00cm apart. The electric field strength between the plates is E = 7,600N/C.



4. What is the potential difference between these two plates? [3 pts]

5. What will be the potential difference between points A and C? [3 pts]