



SN: \_\_\_\_\_, Name: \_\_\_\_\_

Chapter 25, Serway; **ABSOLUTELY NO CHEATING!**

**Please write the answers on the blank space or on the back of this paper to save resources.**

1. Three positive charges are located at the corners of an equilateral triangle as in Figure P25.13. Find an expression for the electric potential at the center of the triangle.

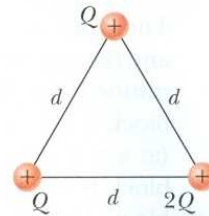


Figure P25.13

2. How much work is required to assemble eight identical charged particles, each of magnitude  $q$ , at the corners of a cube of side  $s$ ?
3. How many electrons should be removed from an initially uncharged spherical conductor of radius 0.300 m to produce a potential of 7.50 kV at the surface?