

Find the equipotentials for two different physical situations.

- Four equal positive charges arranged in a square.
- Two positive and two negative charges with equal magnitude arranged in a square with like charges on opposite corners. (This distribution of charges is called a quadrupole.)

Use ONLY the iconic formula for the electrostatic potential $V = \frac{1}{4\pi\epsilon_0} \frac{q}{r}$ and the superposition principle. Do NOT use reasoning about electric fields vectors or electric field lines that you may have learned in other courses.