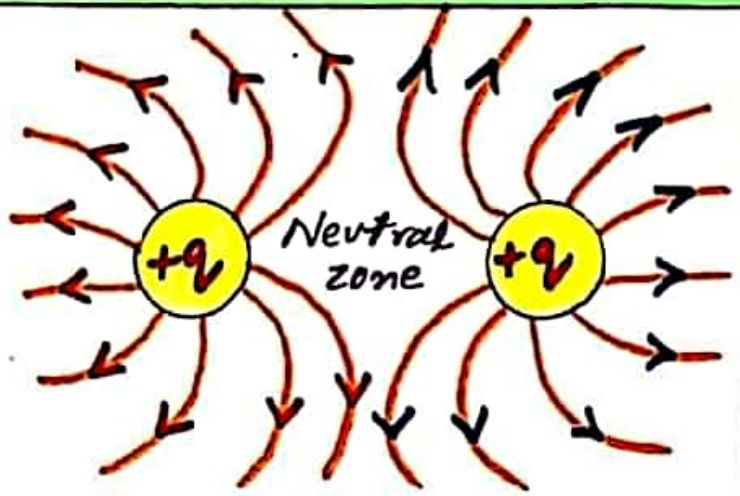


Here,

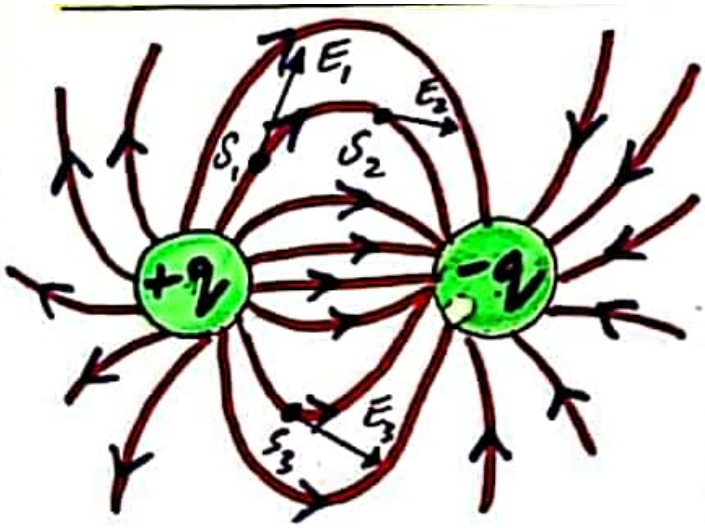
- Both +ve point charges are of equal magnitude.
- The field lines are "curved."
- The lines in region b/w these two charges **repel** each other.

Middle region:~

It is "**zero field spot**" or "**neutral zone**".

Note:~

The behaviour of two identical "-ve" charges will be same but arrows will be "**directed inward**".



Here,

- Both opposite charges are of equal magnitude.
- The field lines start from +ve charge and end at -ve charge. (+ve → -ve).

Tangents:~

We draw tangents on points **1, 2 and 3** to tell **directions** of resultant intensities (E_1, E_2 and E_3).

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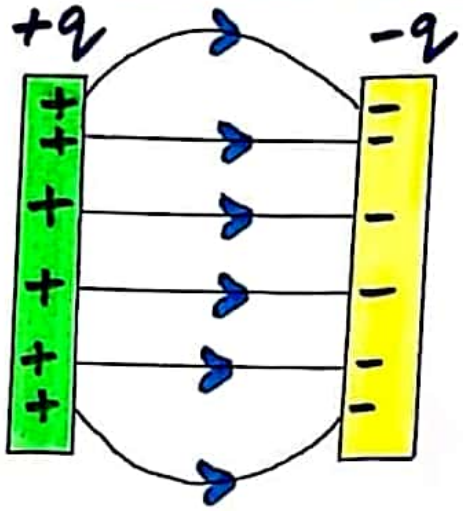
5. Electric field lines for two oppositely charged parallel plates:

Here,
Field is uniform in the middle region.



Here:~
These field lines have:~
(1.) same direction
(2.) same magnitude
(3.) are parallel
(4.) are evenly-spaced

Properties of Electric field lines:~

1. Origination of field lines:~

These lines start from +ve charge and end on the -ve charge. $(+q \longrightarrow -q)$

2. Tangents tell Direction:~

The tangents to field lines gives "direction" of electric field.

3. Strong and Weak field:~

The lines are "closer" where field is "strong" and are farther apart (distant) where field is "weak".

4. $\vec{E}$ has only one direction:~

No two electric field lines "intersect" each other. This is because $\vec{E}$ has only one direction at any given point. If the lines cross,

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