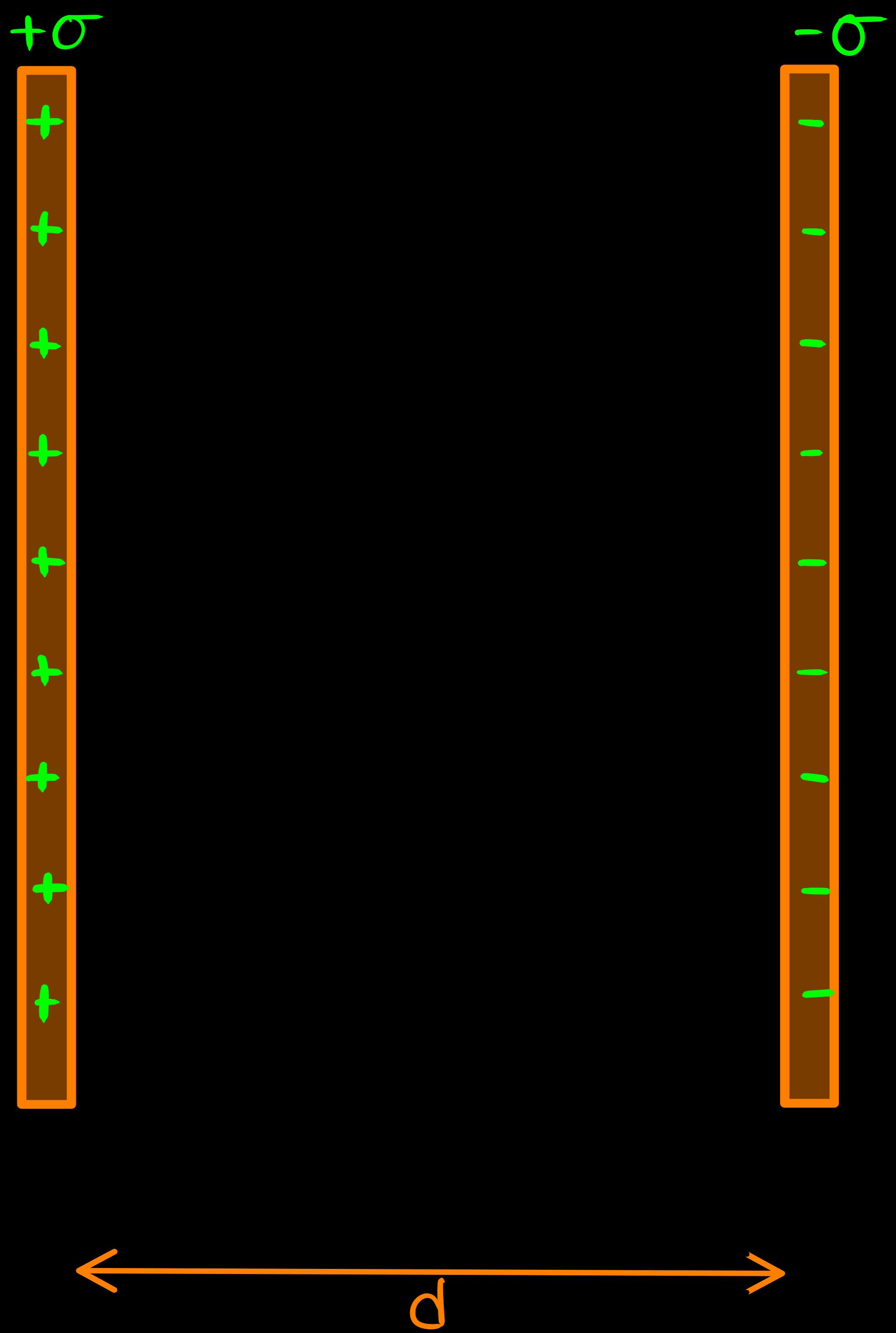


Capacitance of a parallel plate capacitor, partly filled with dielectric

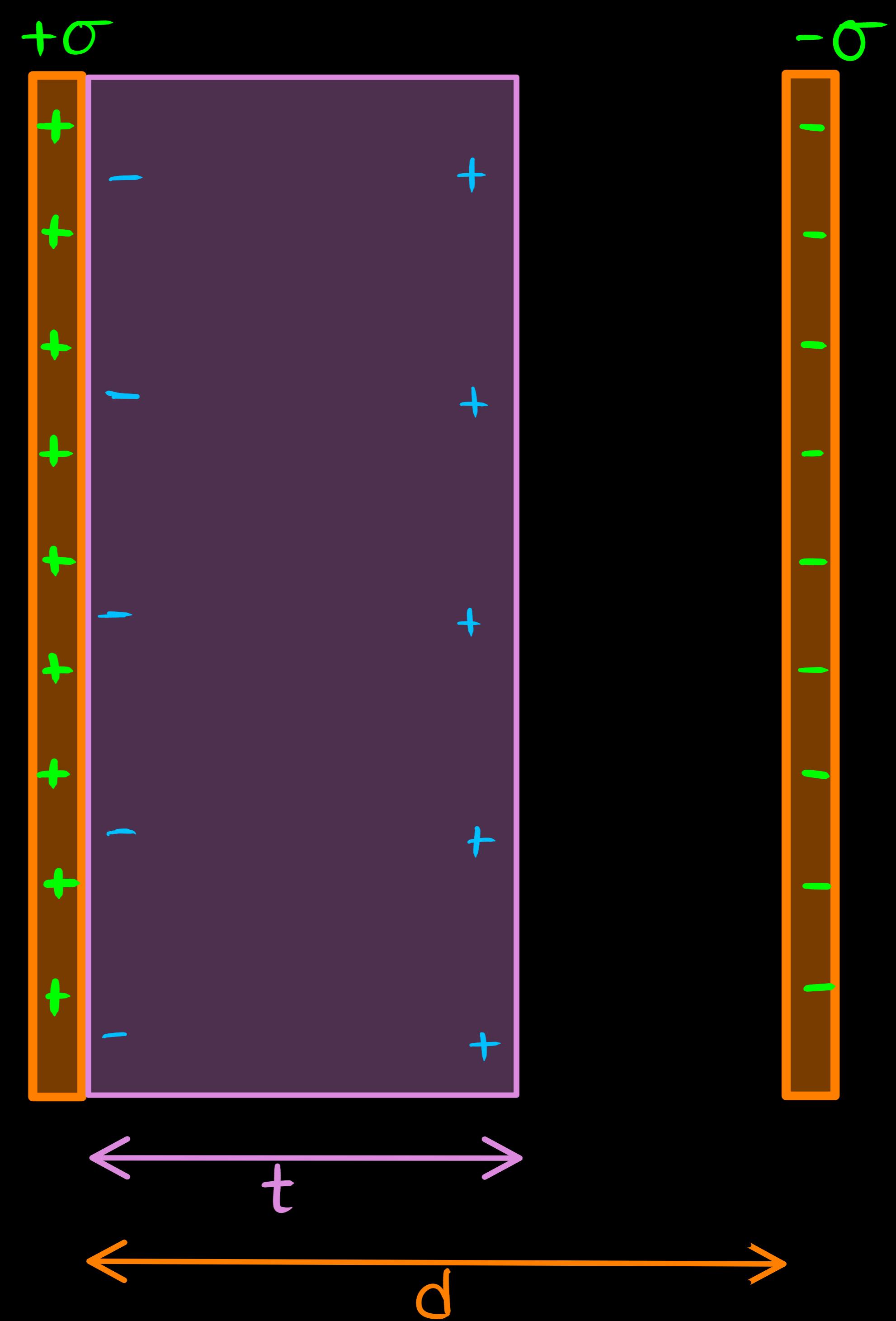
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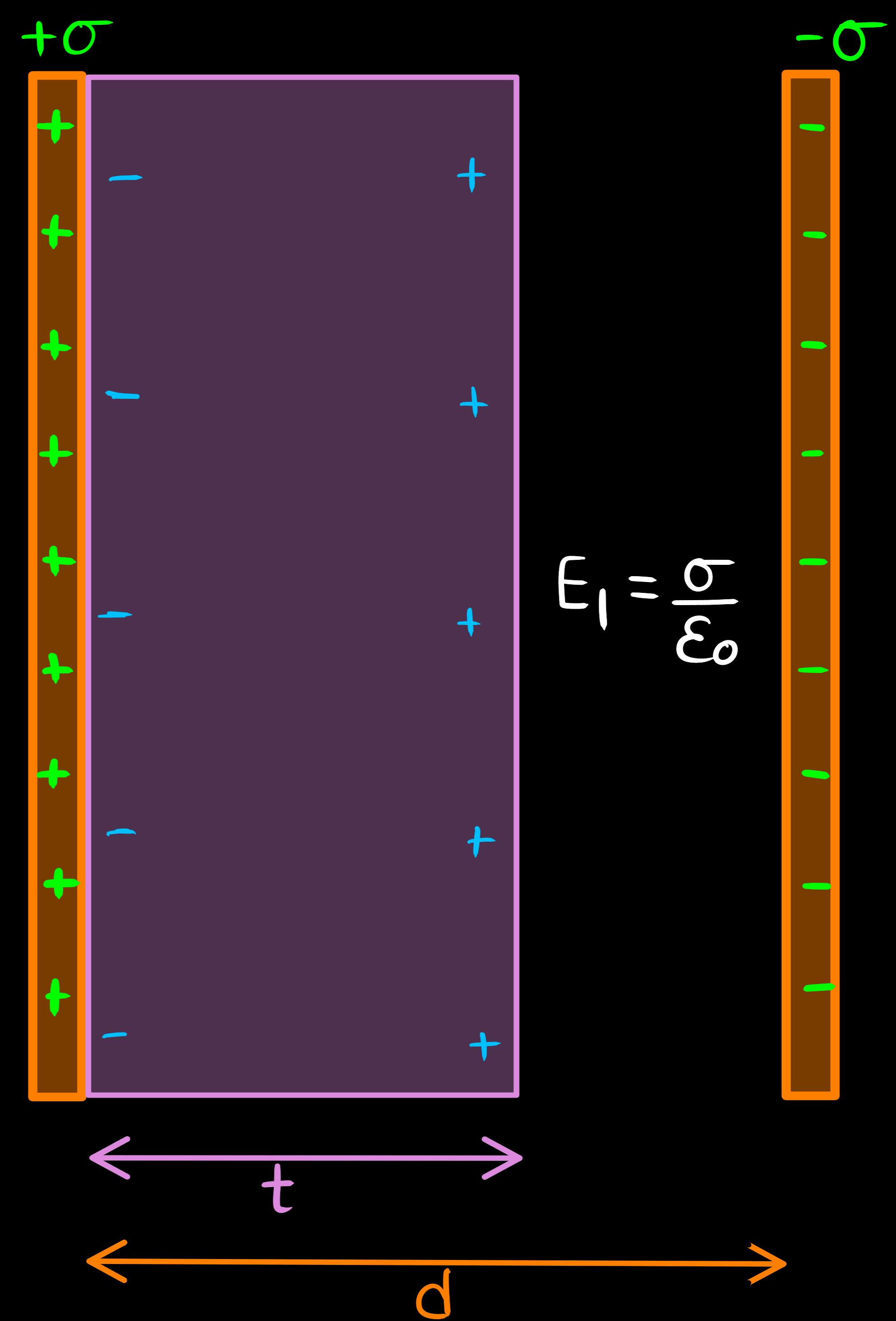
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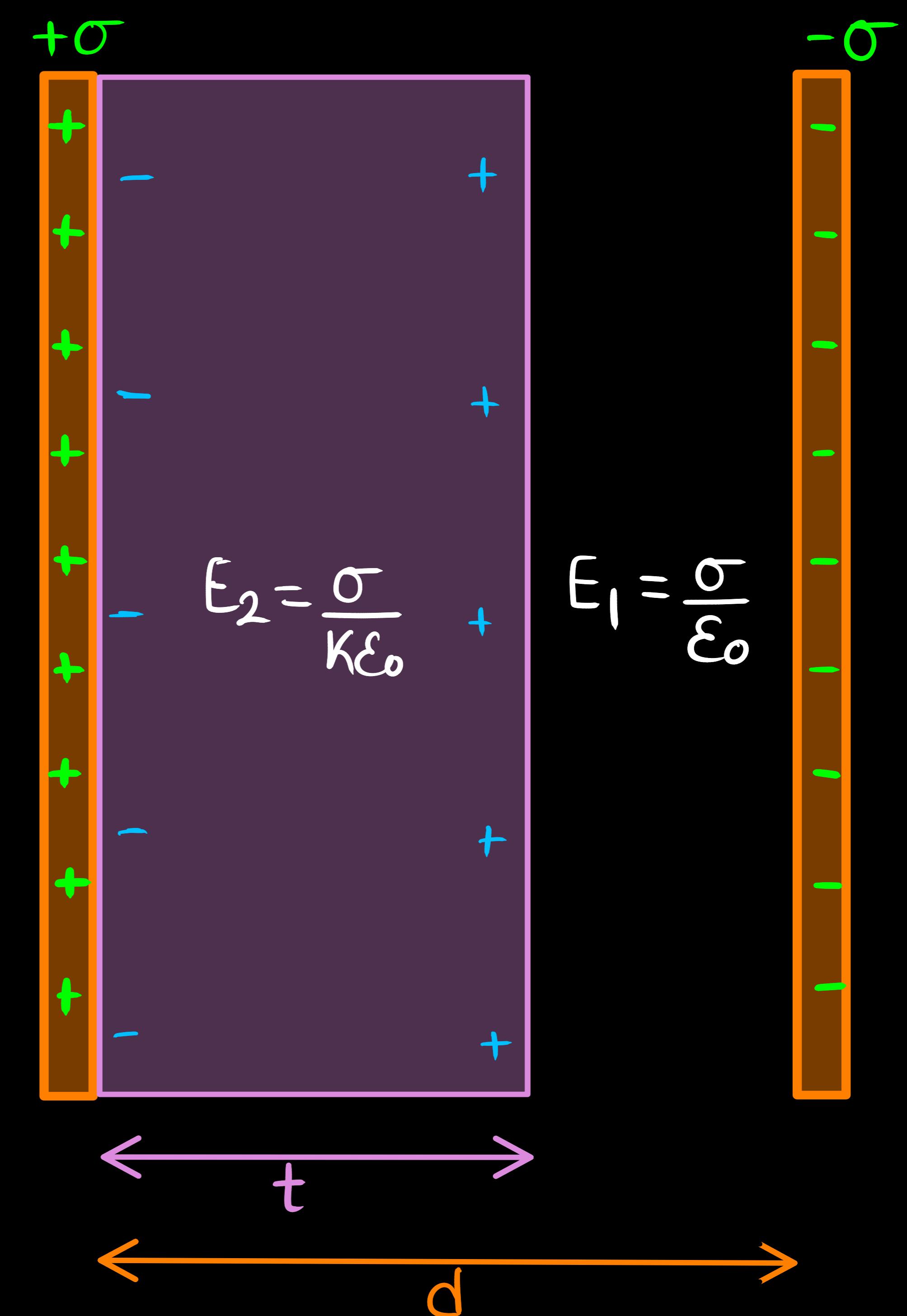
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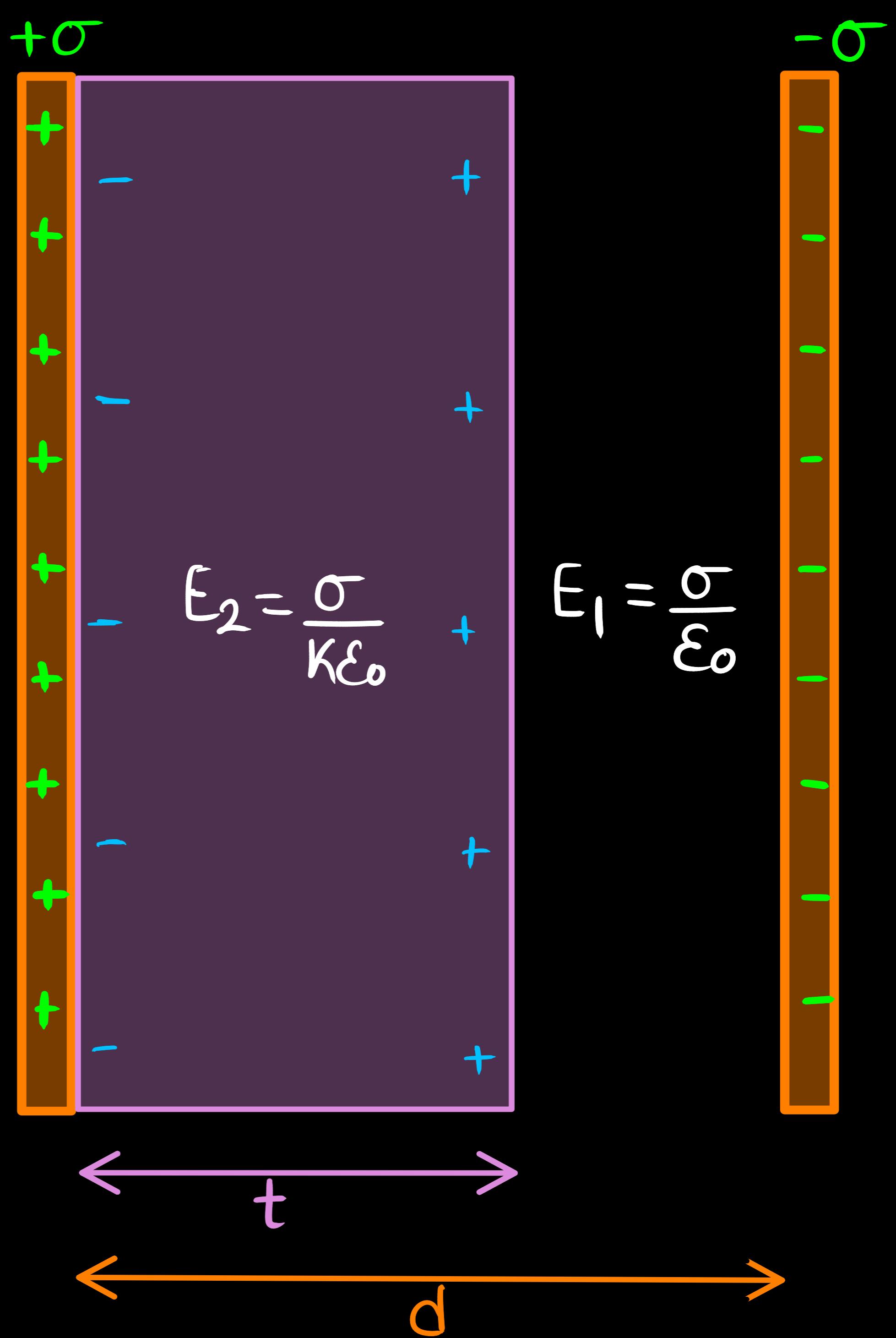
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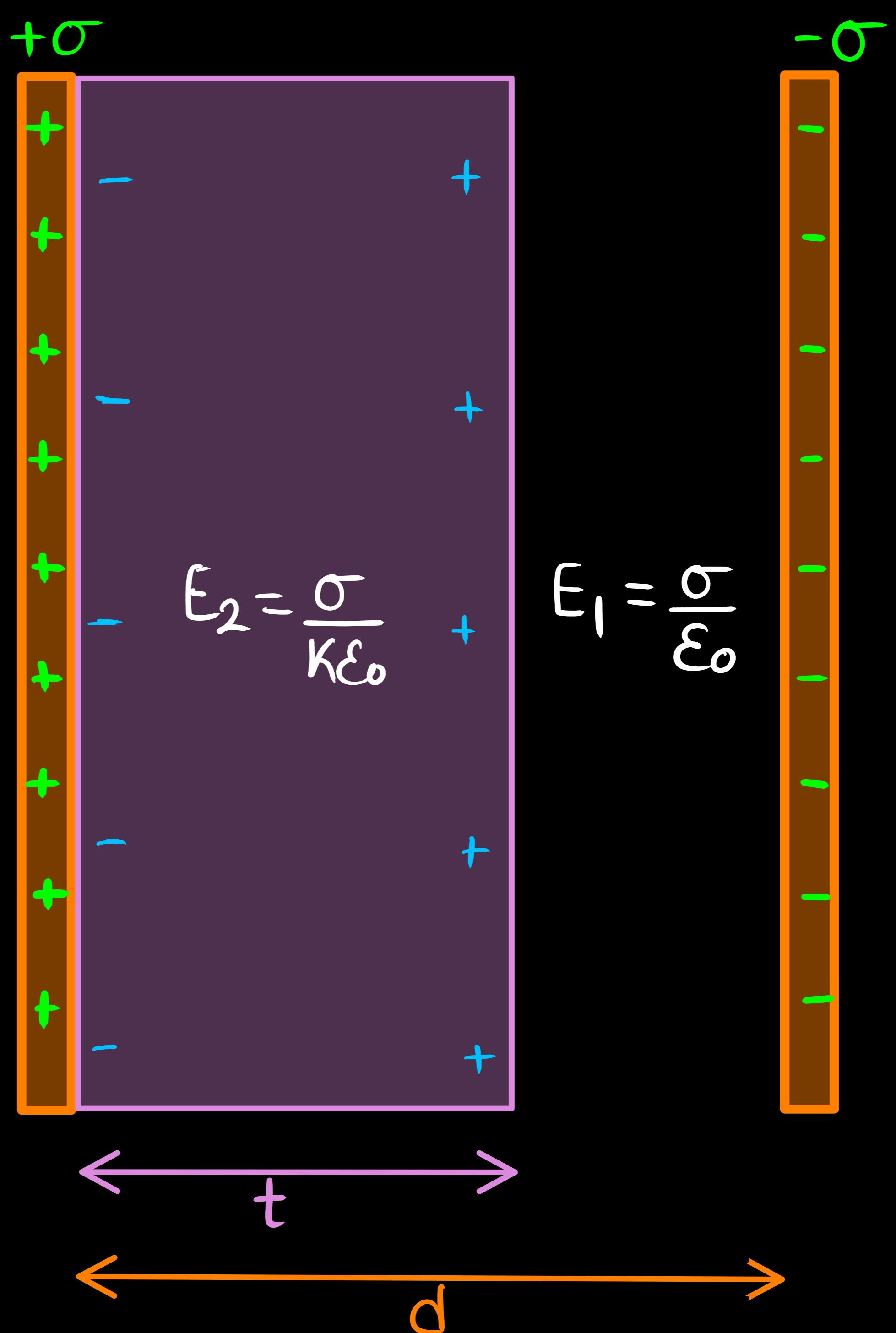
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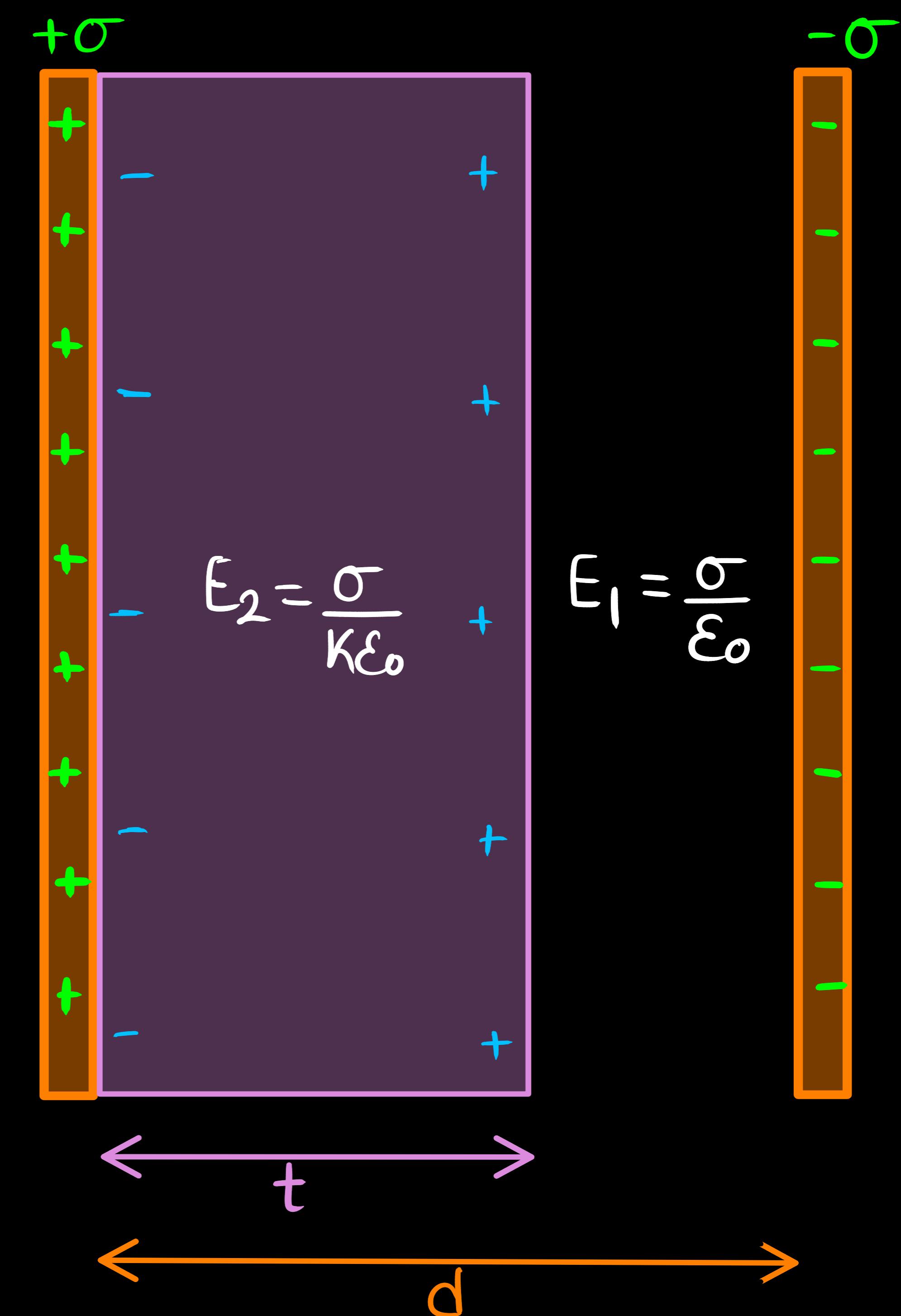
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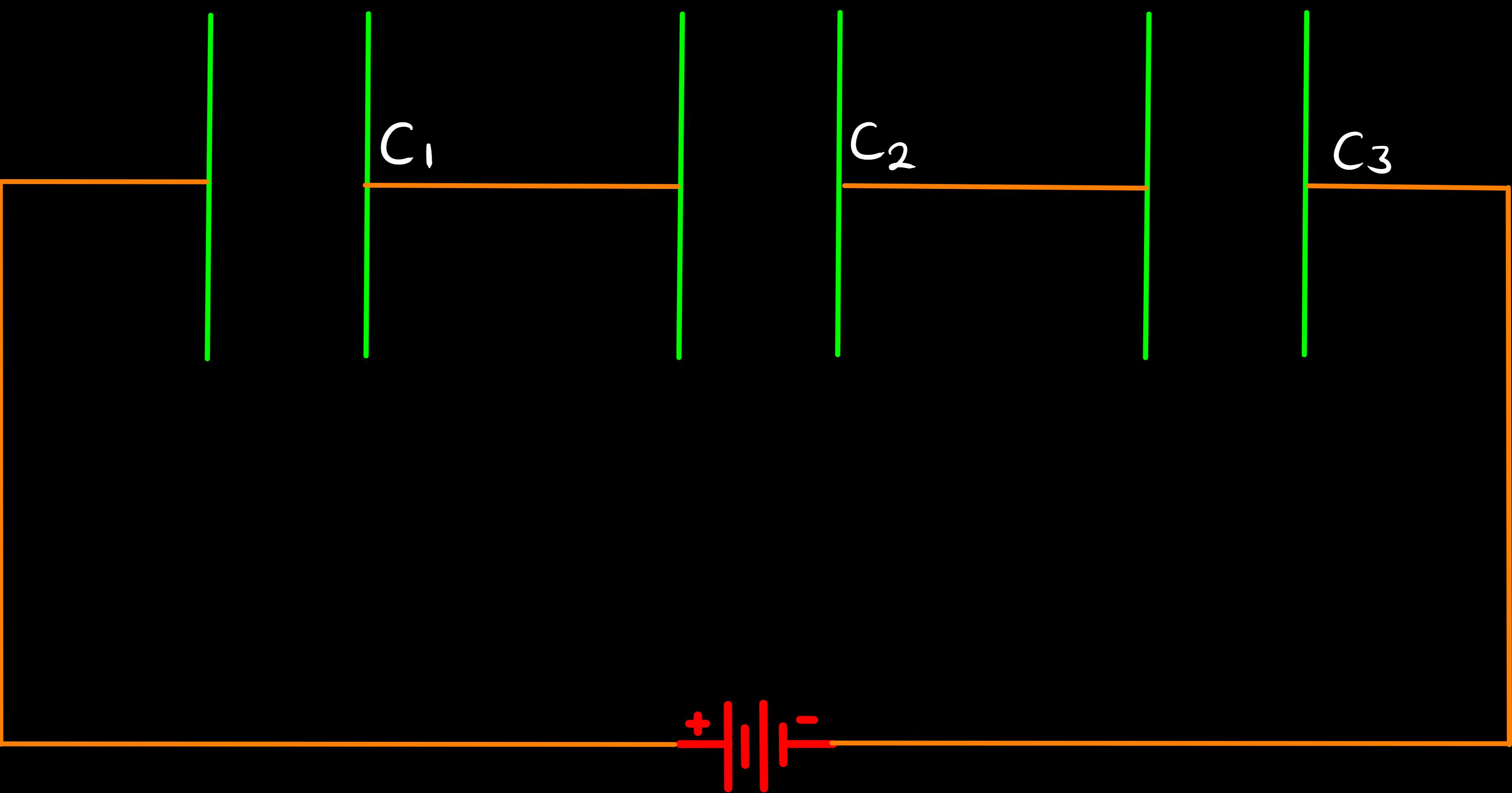
Combination of capacitors

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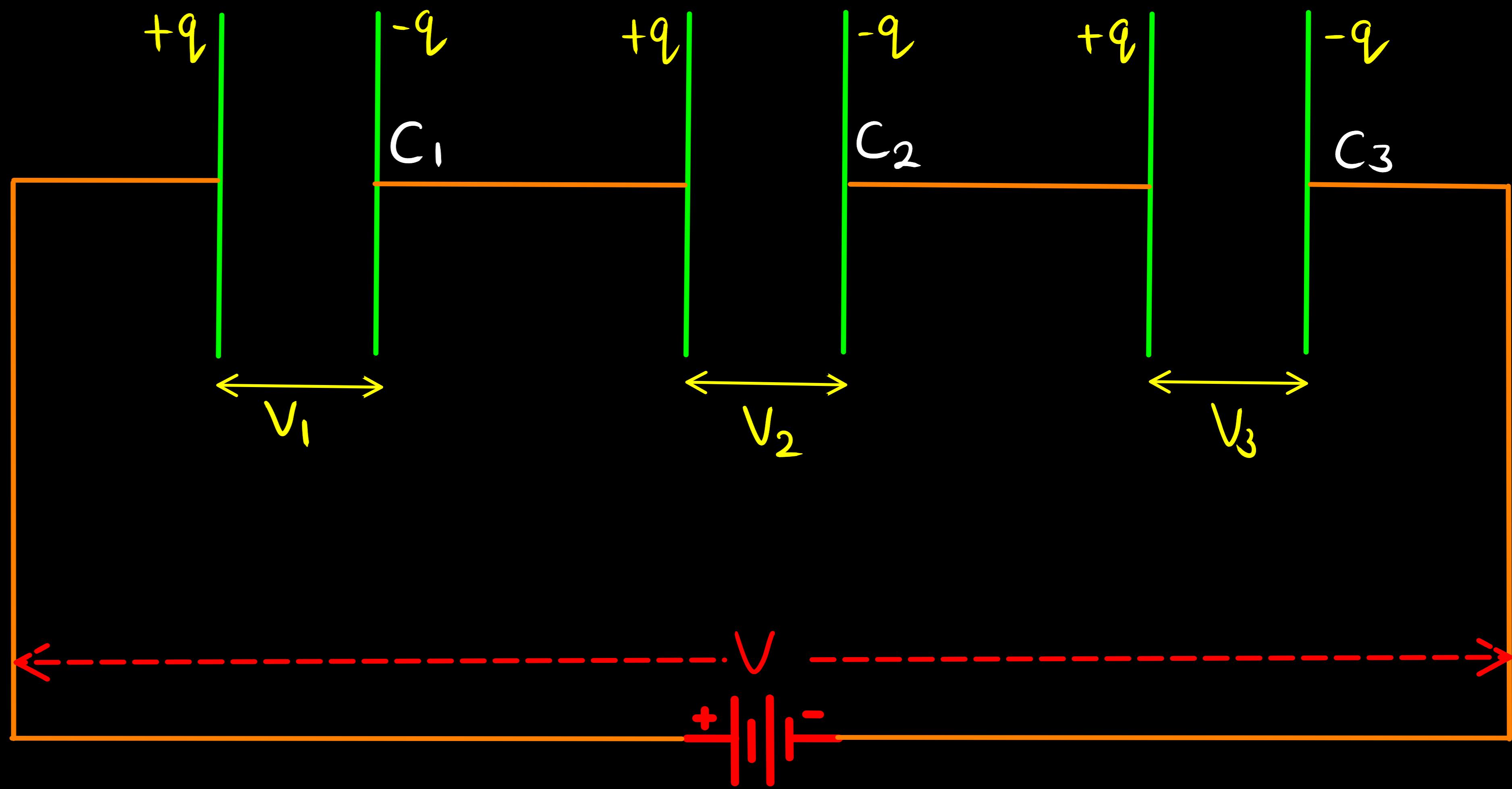


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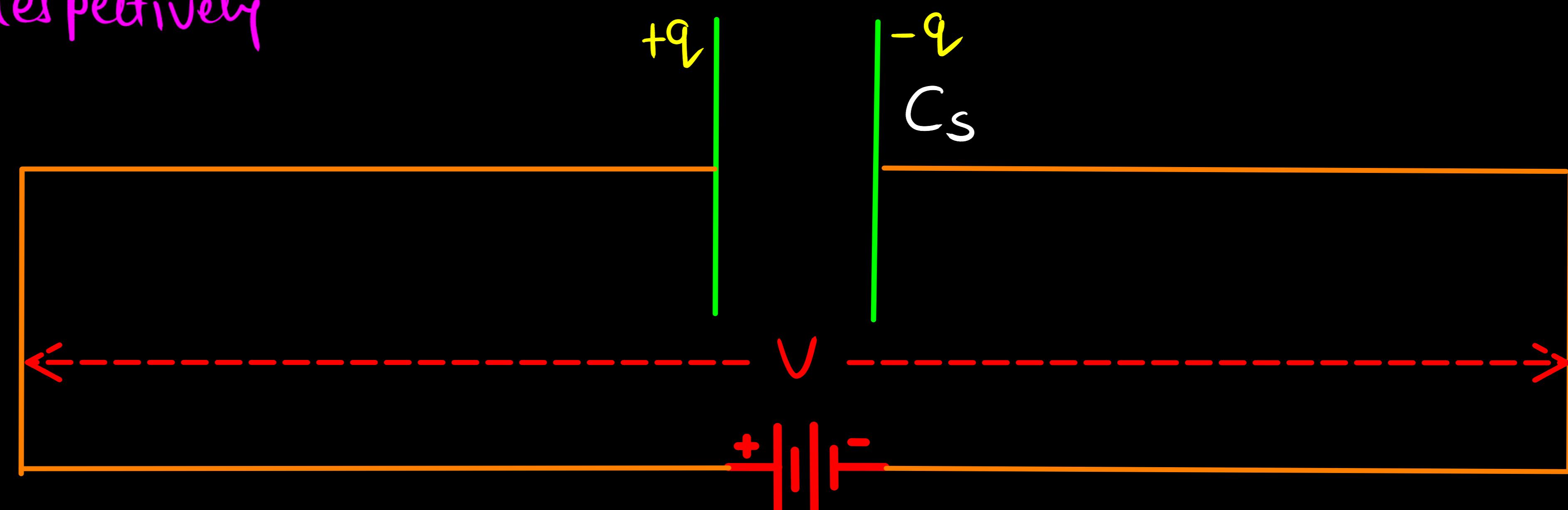
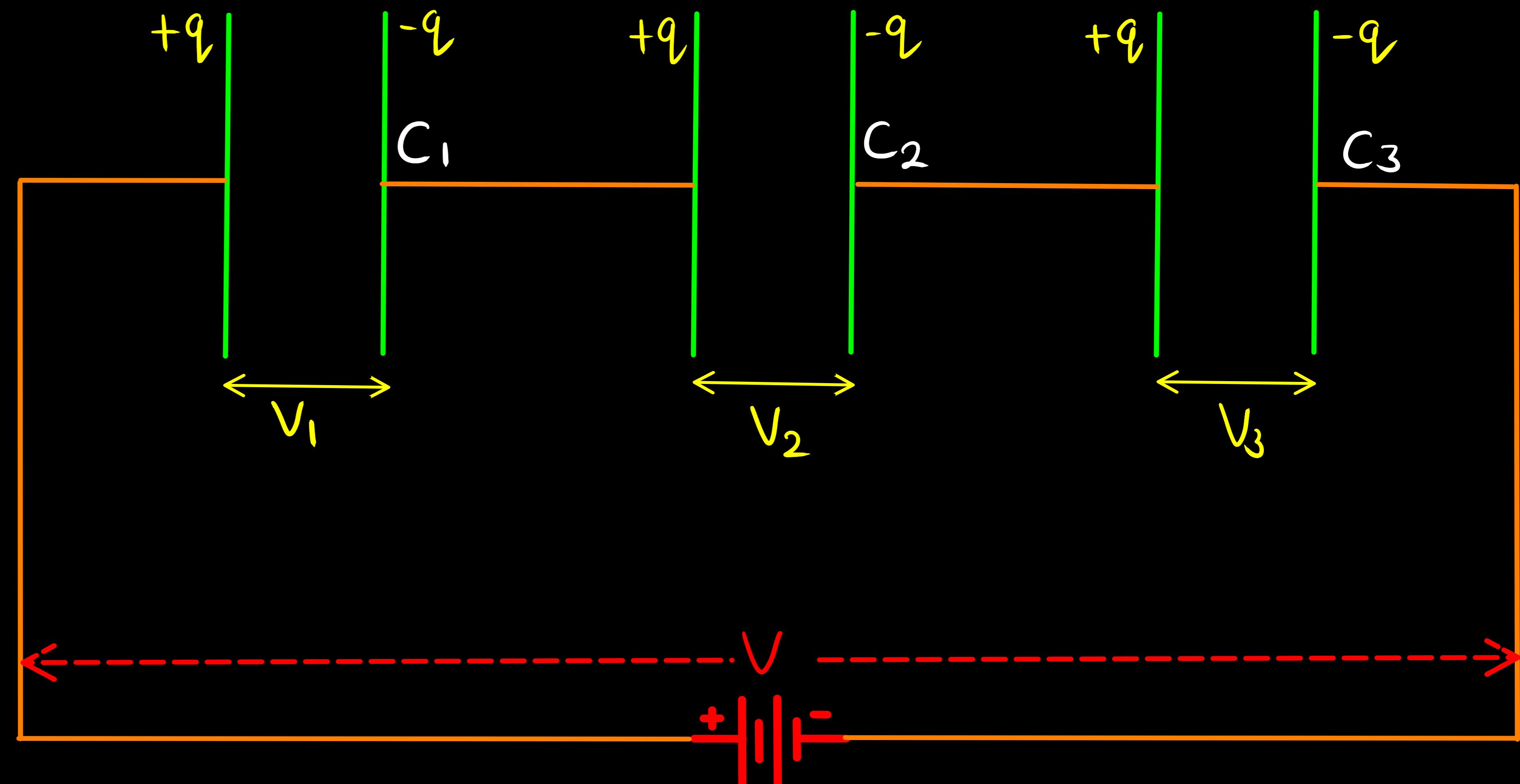
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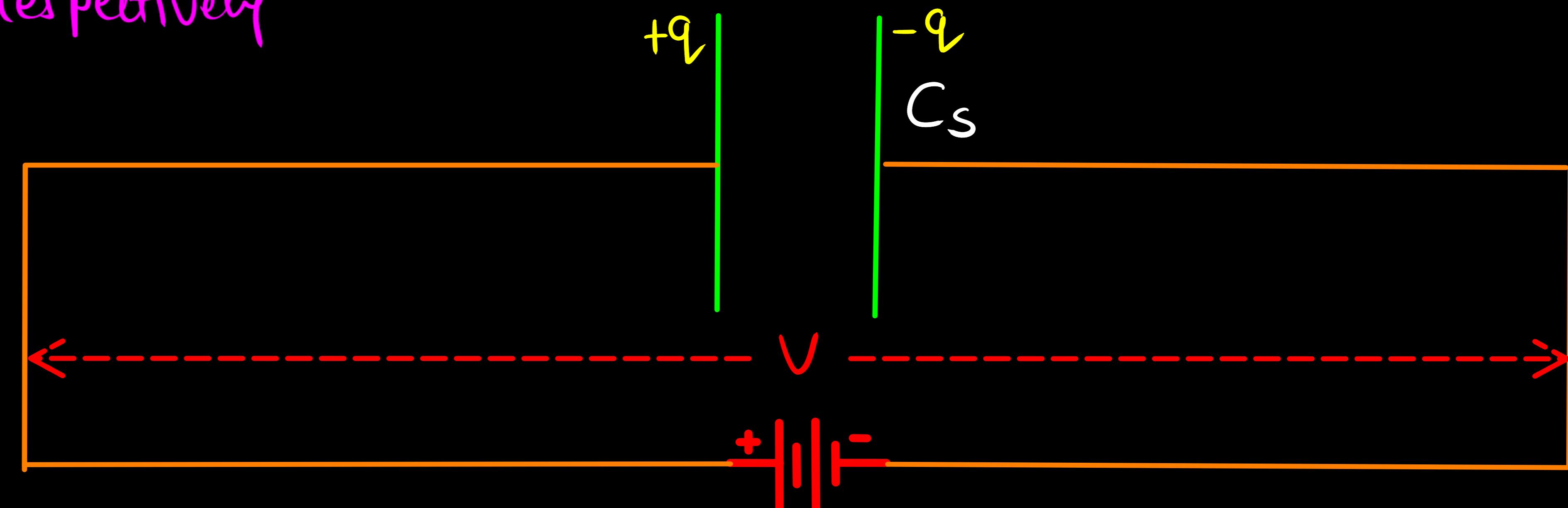
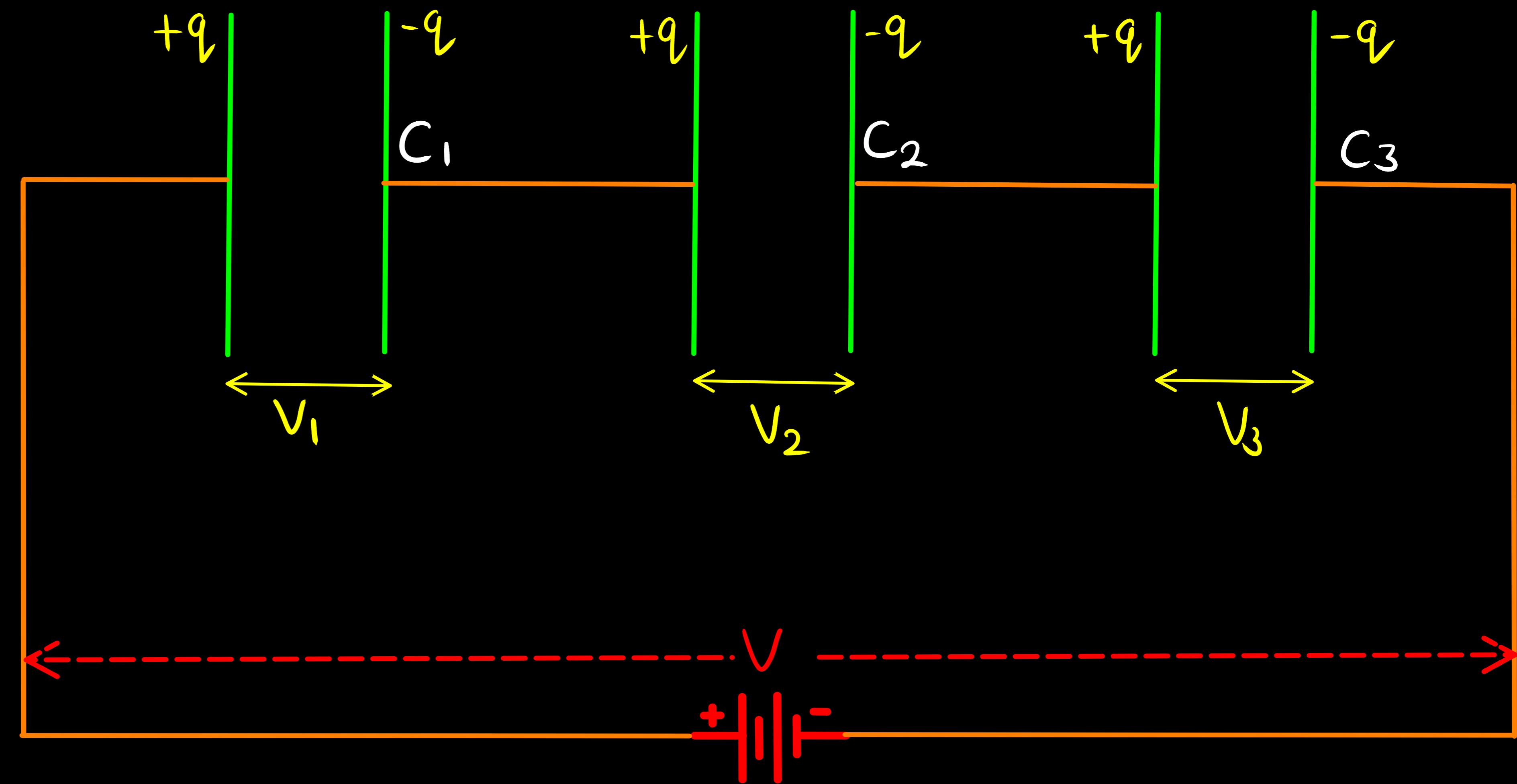
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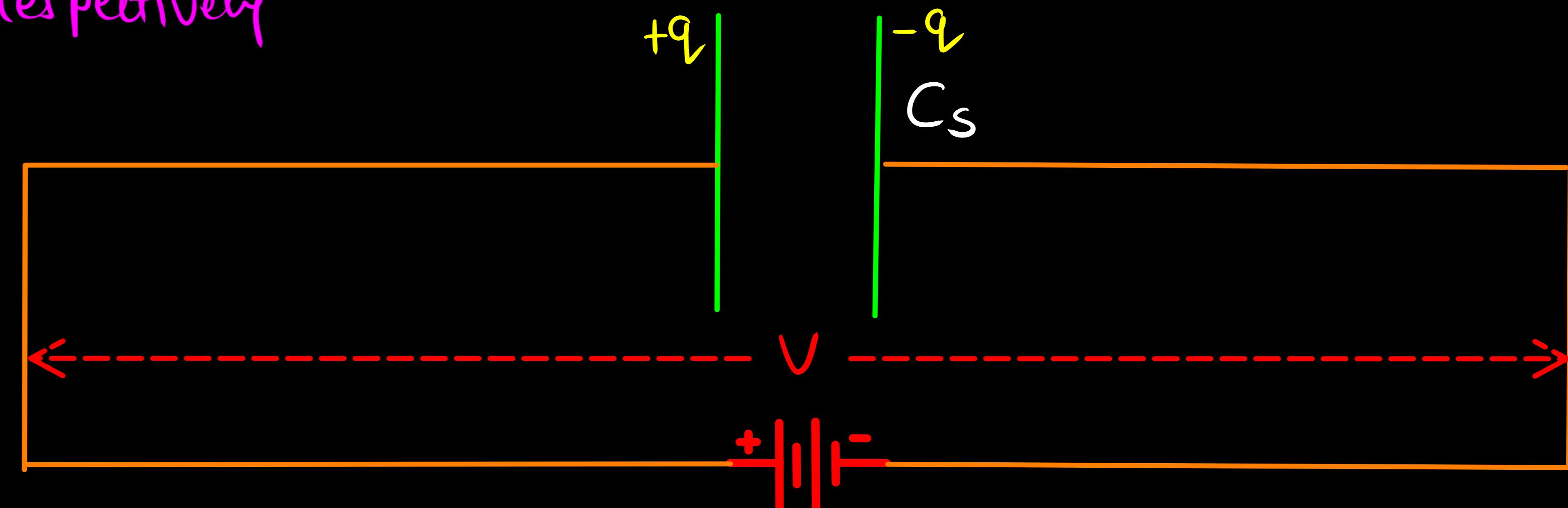
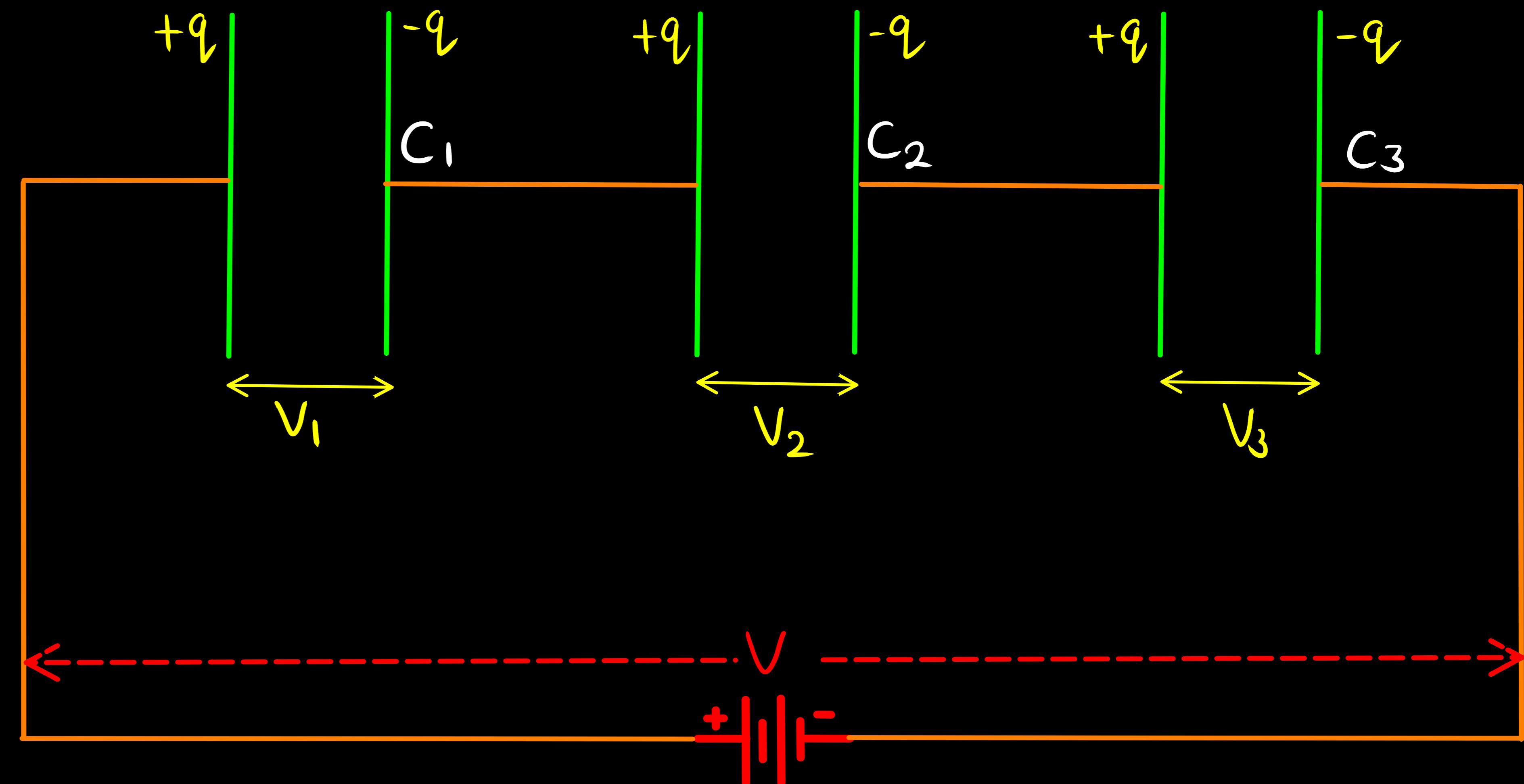
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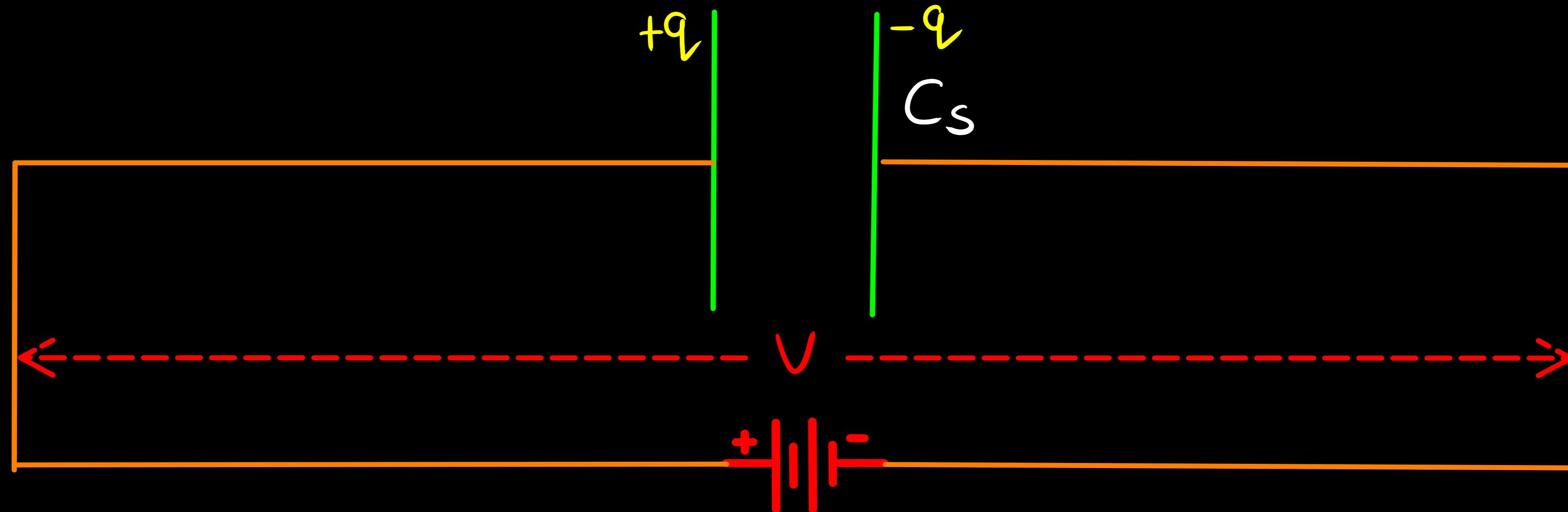
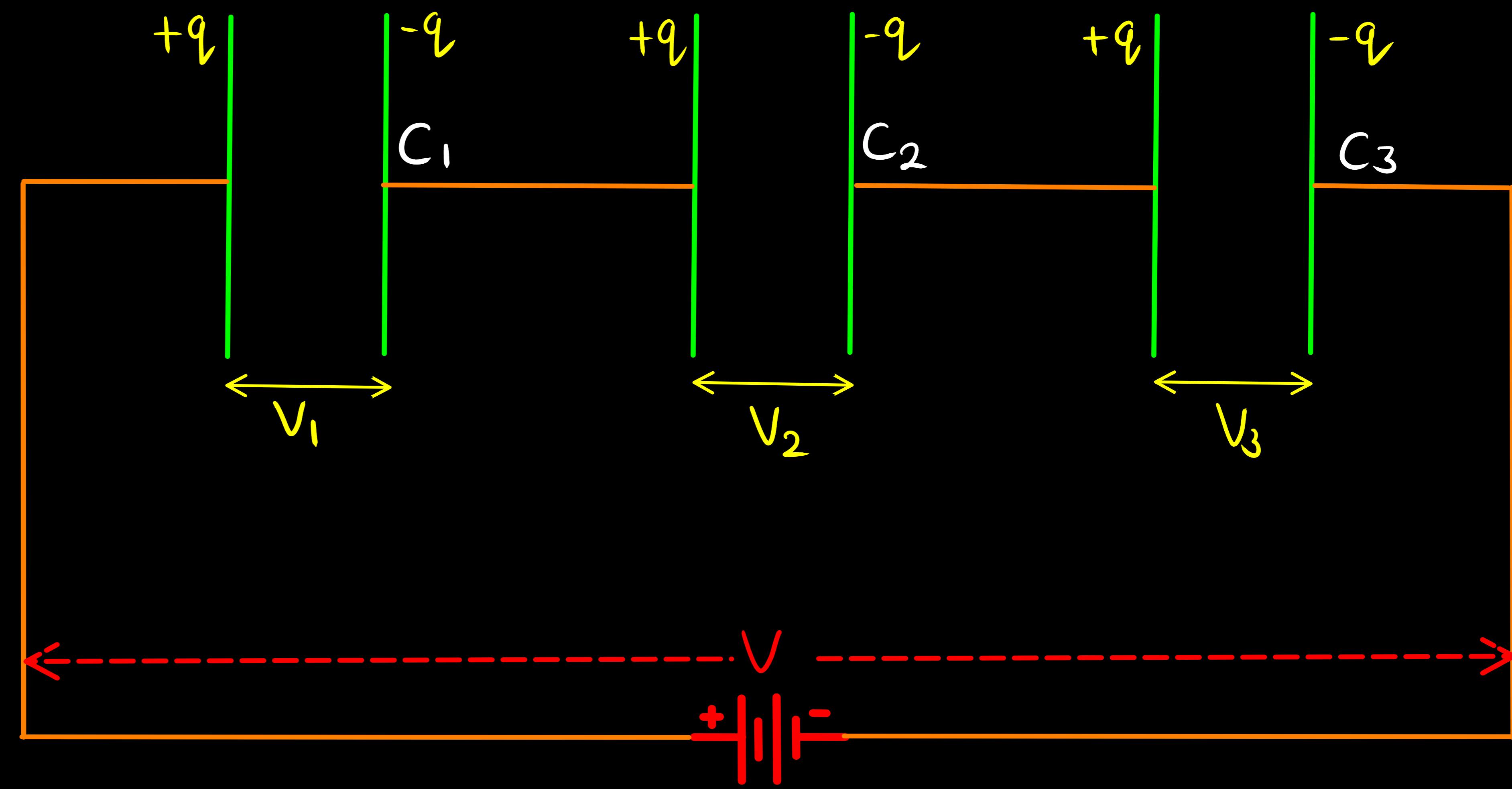
$$V = V_1 + V_2 + V_3$$

$$V = \frac{Q}{C_1} + \frac{Q}{C_2} + \frac{Q}{C_3} \quad \text{--- (1)}$$



Combination of capacitors

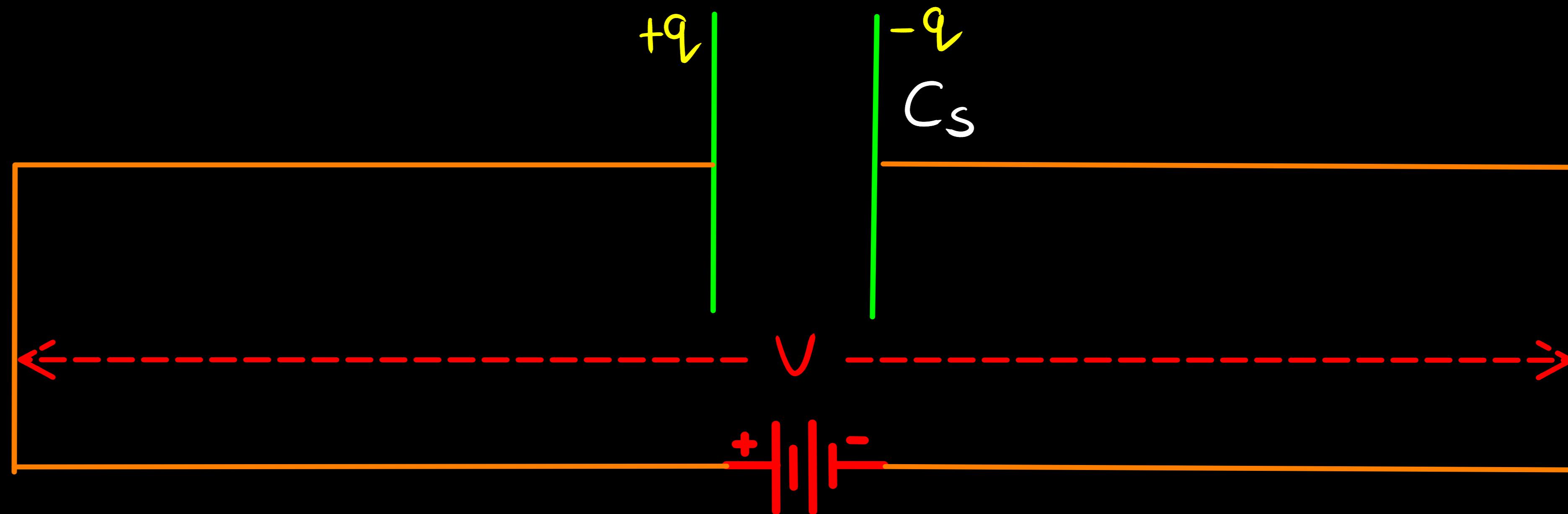
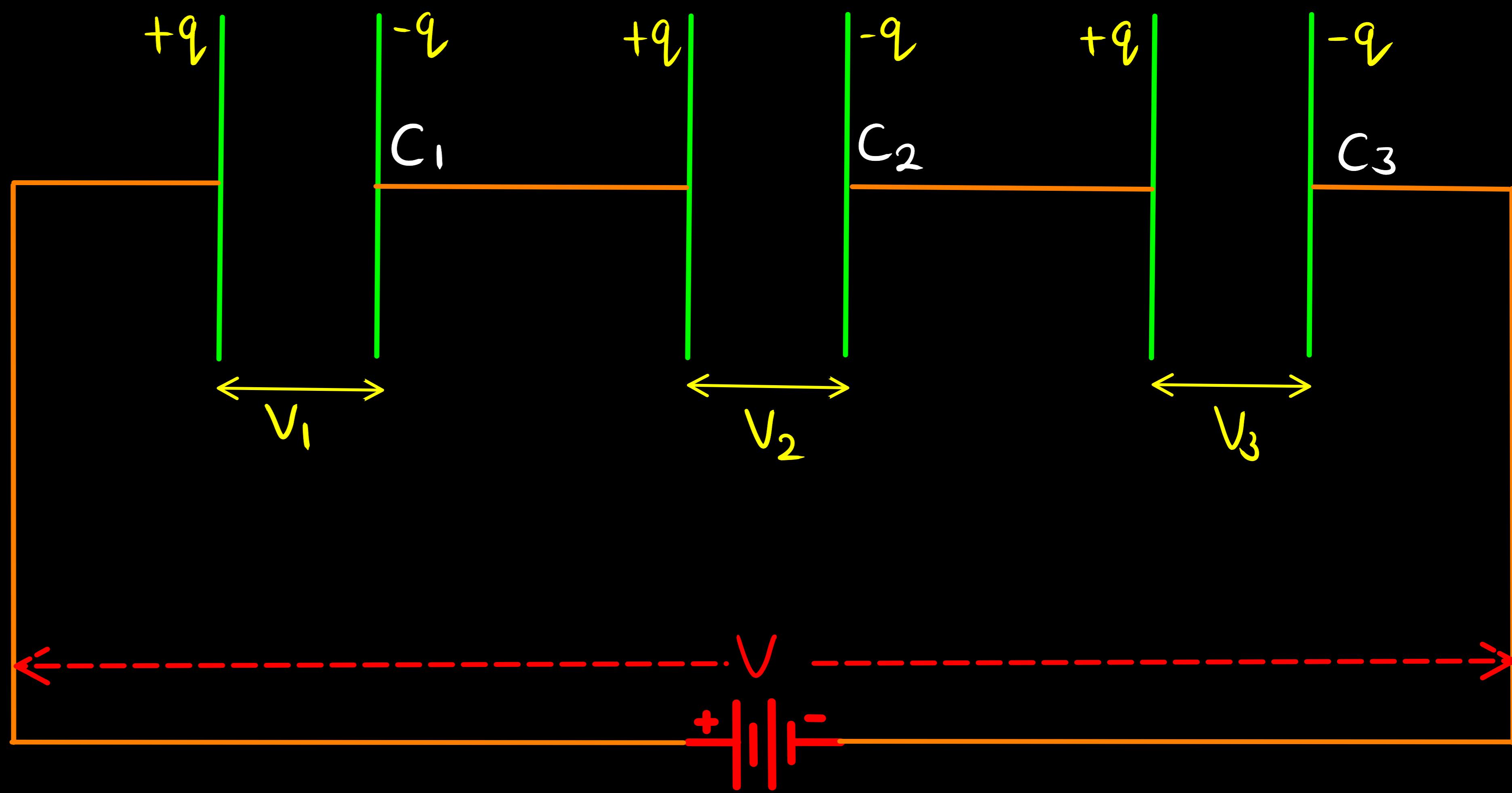
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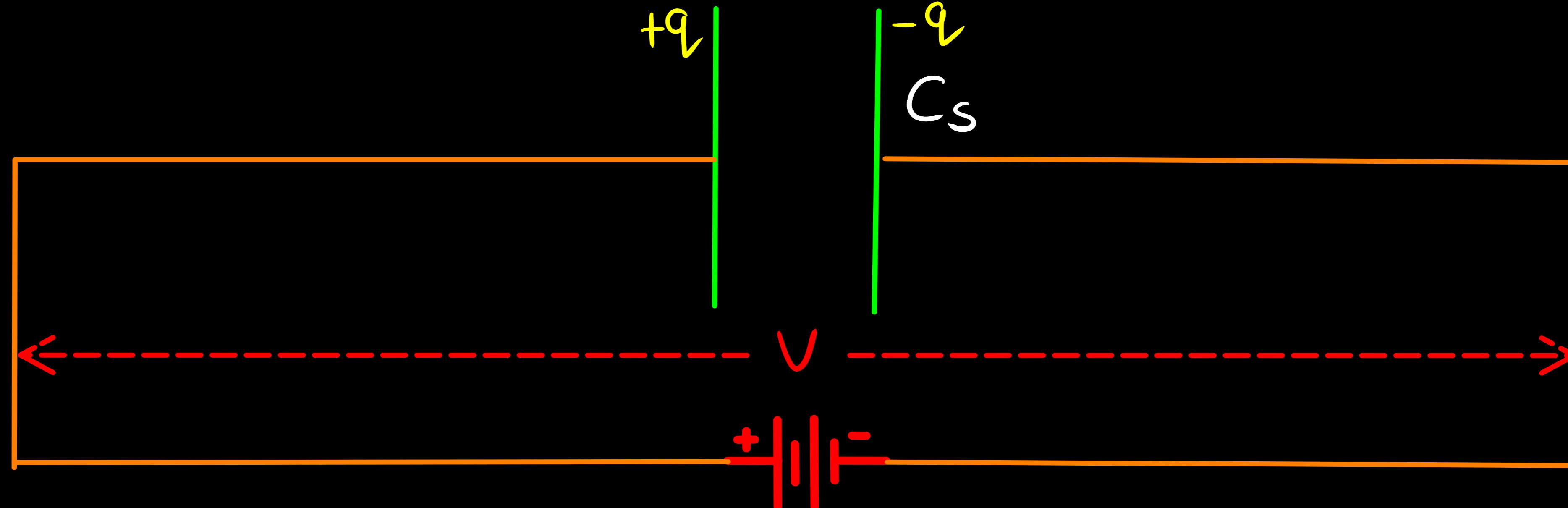
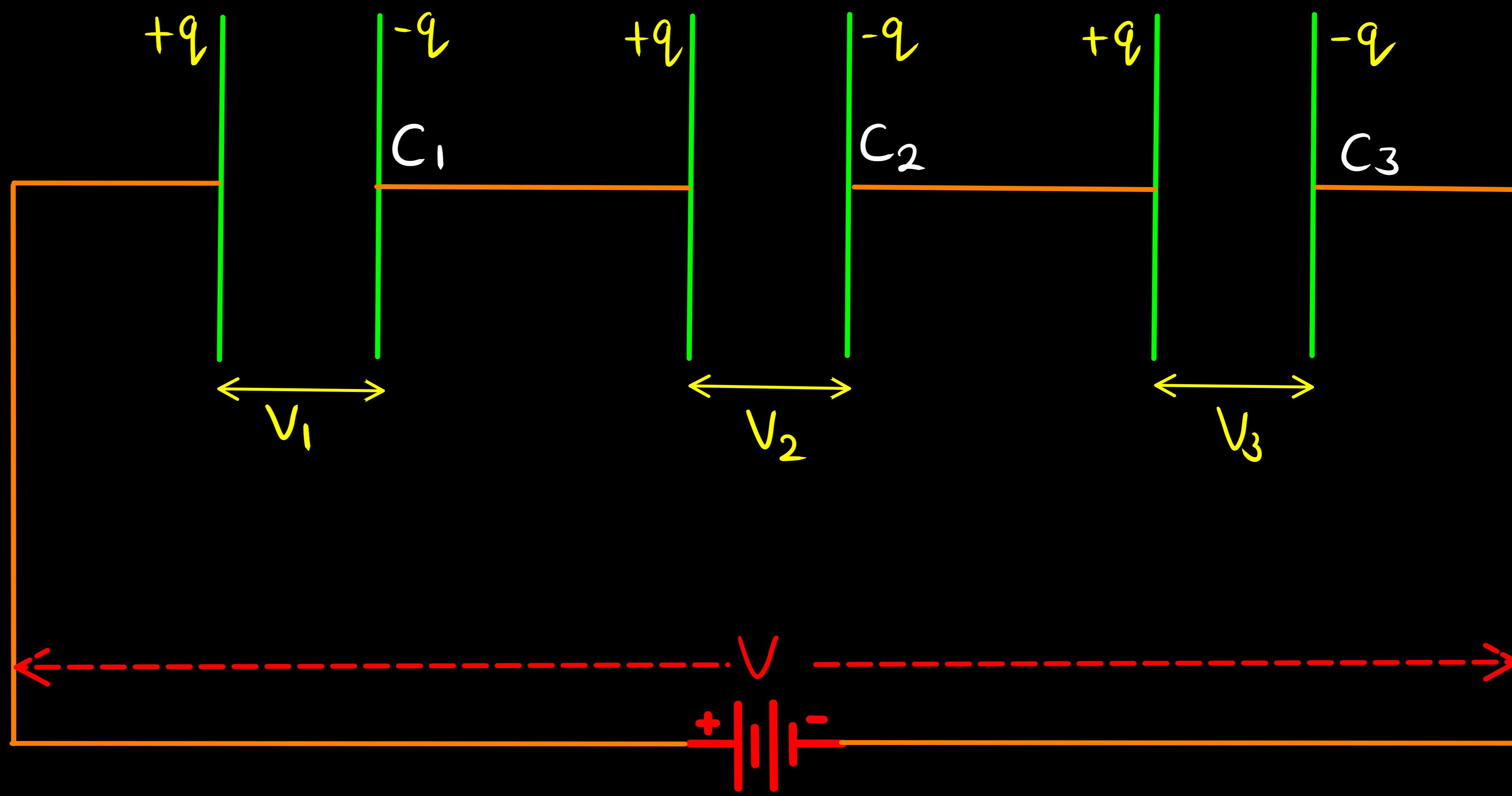
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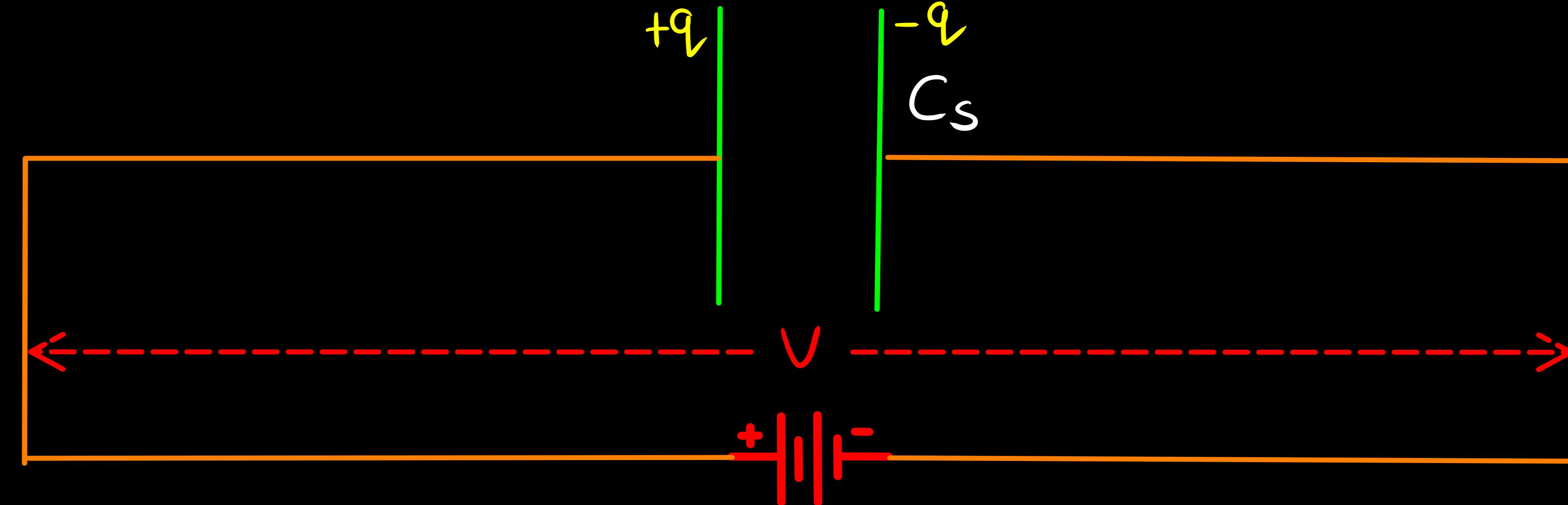
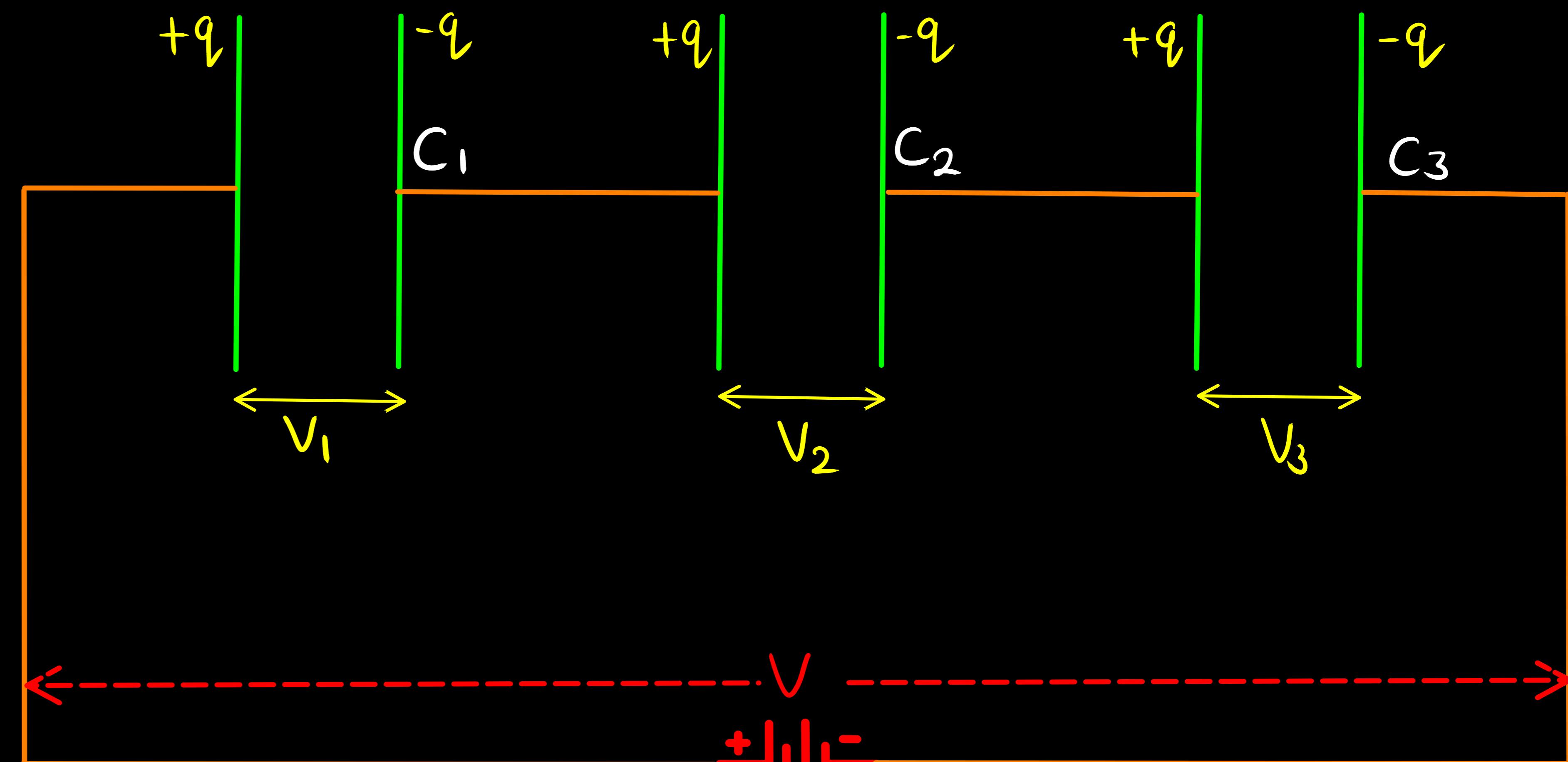
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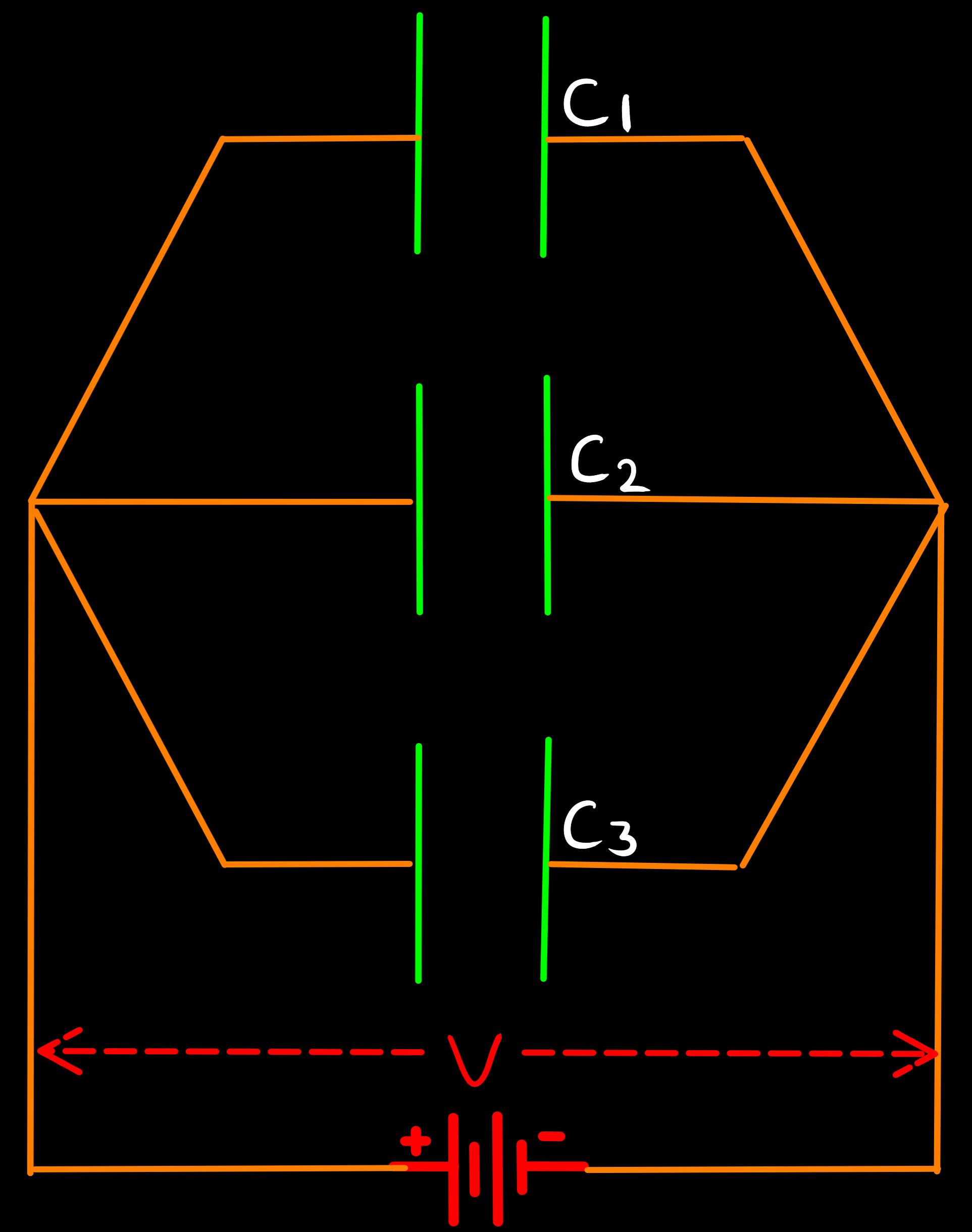
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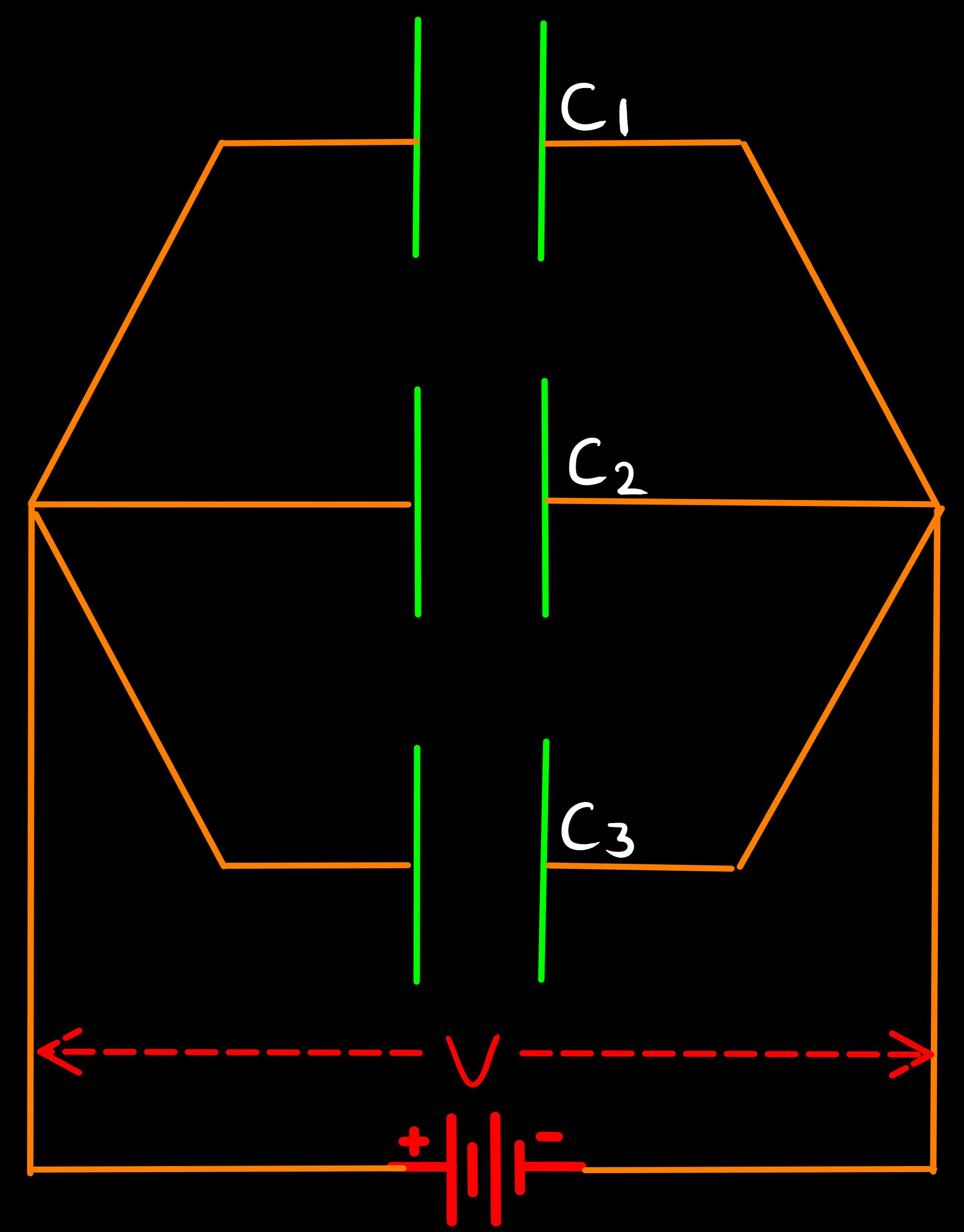
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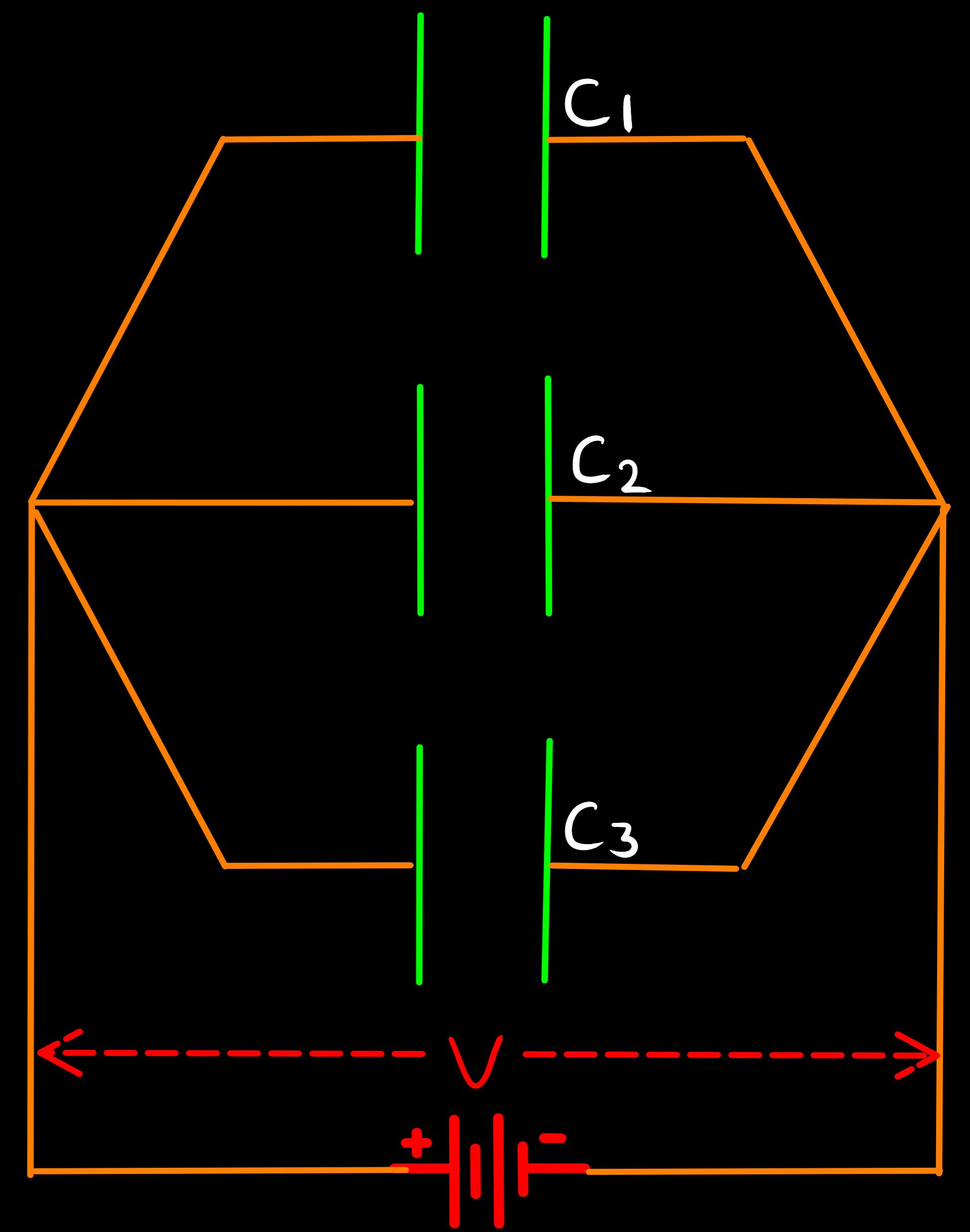
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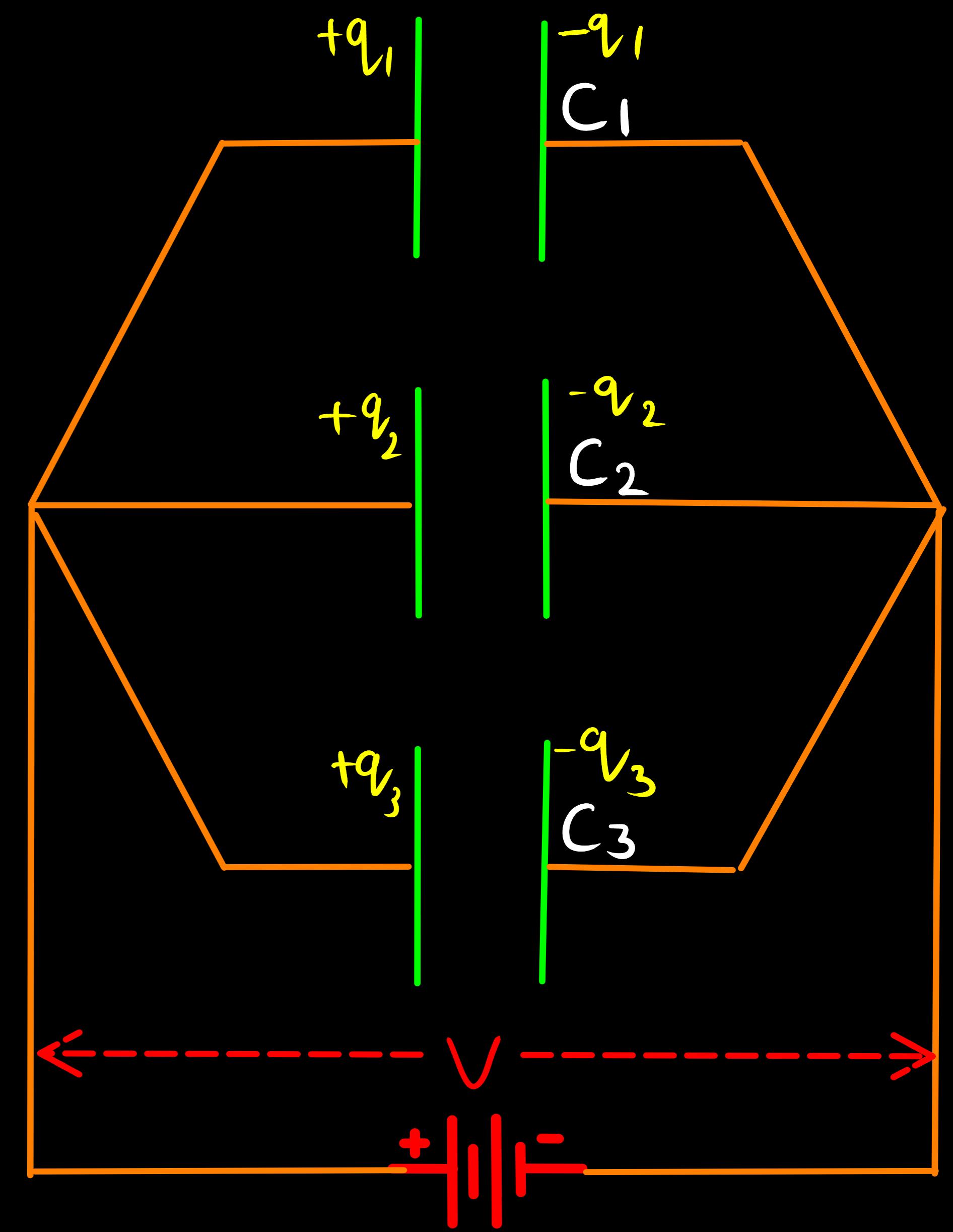
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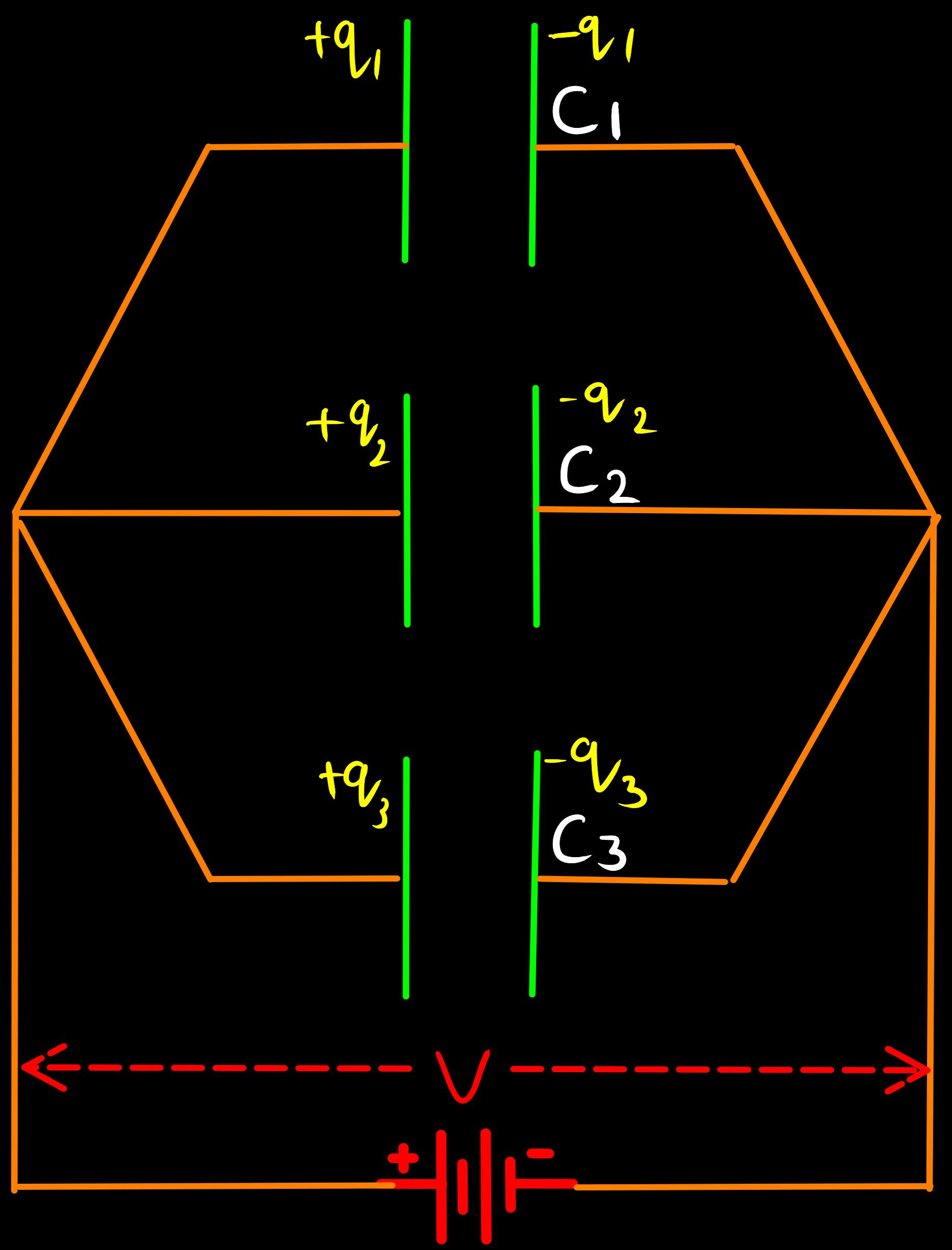
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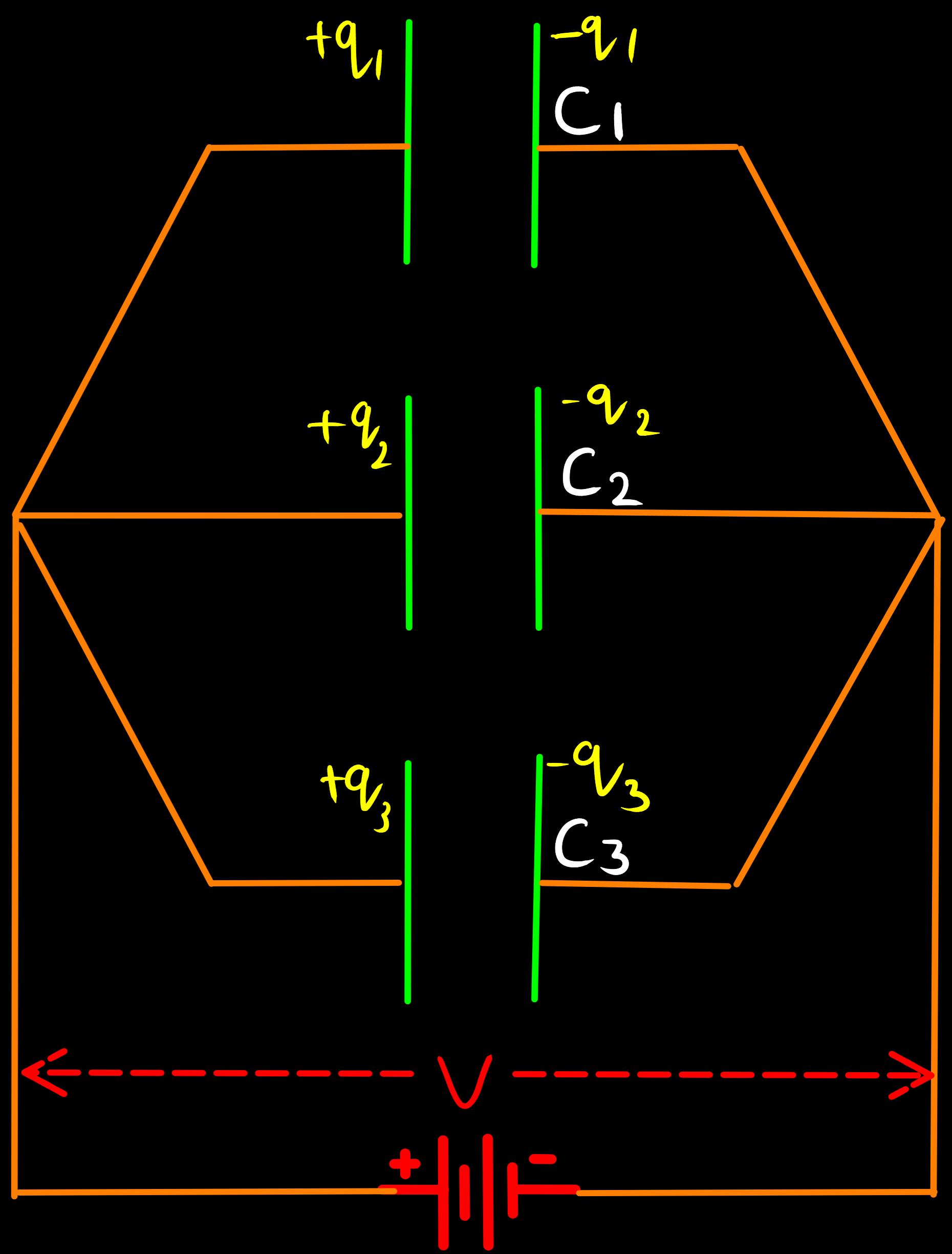
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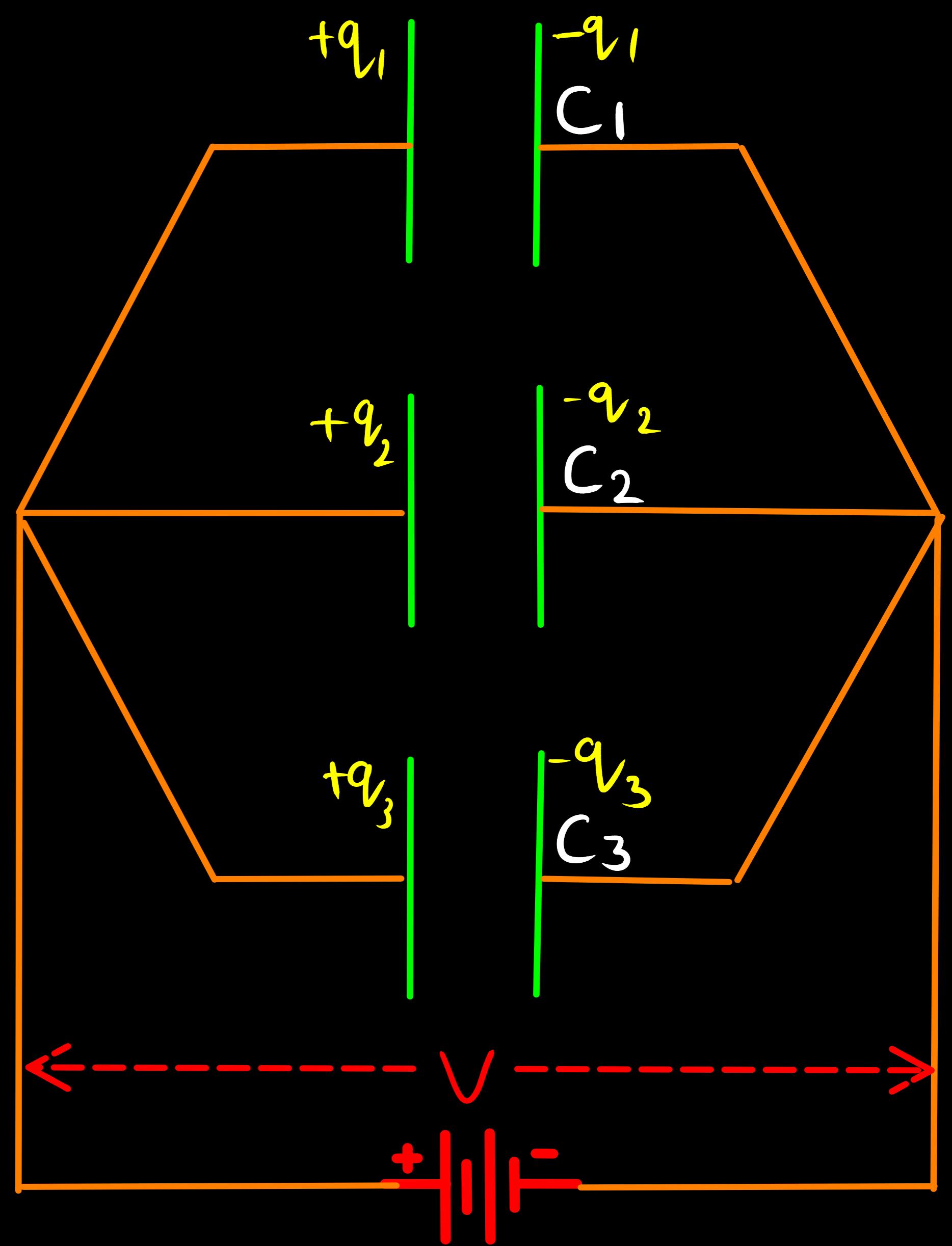
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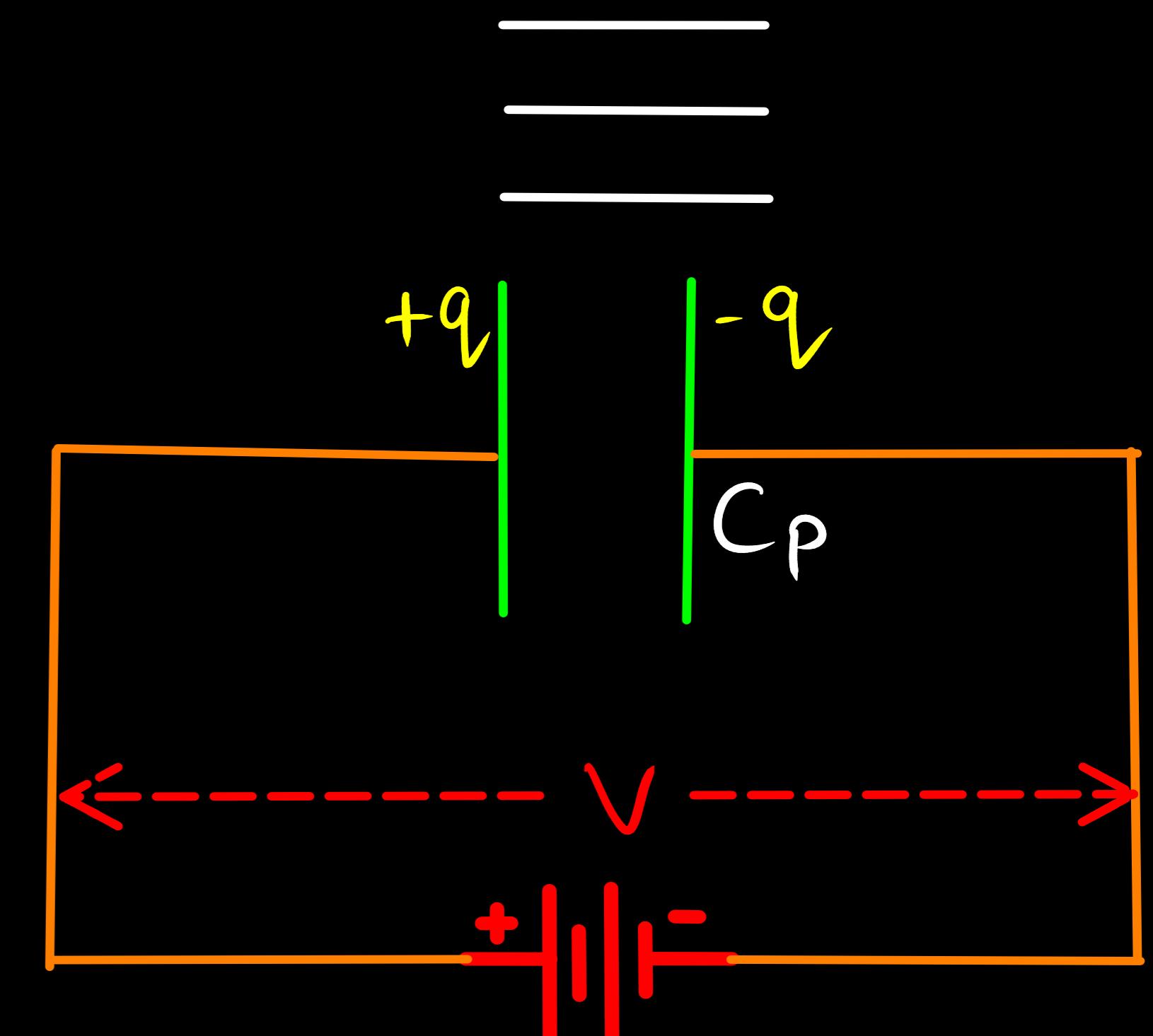
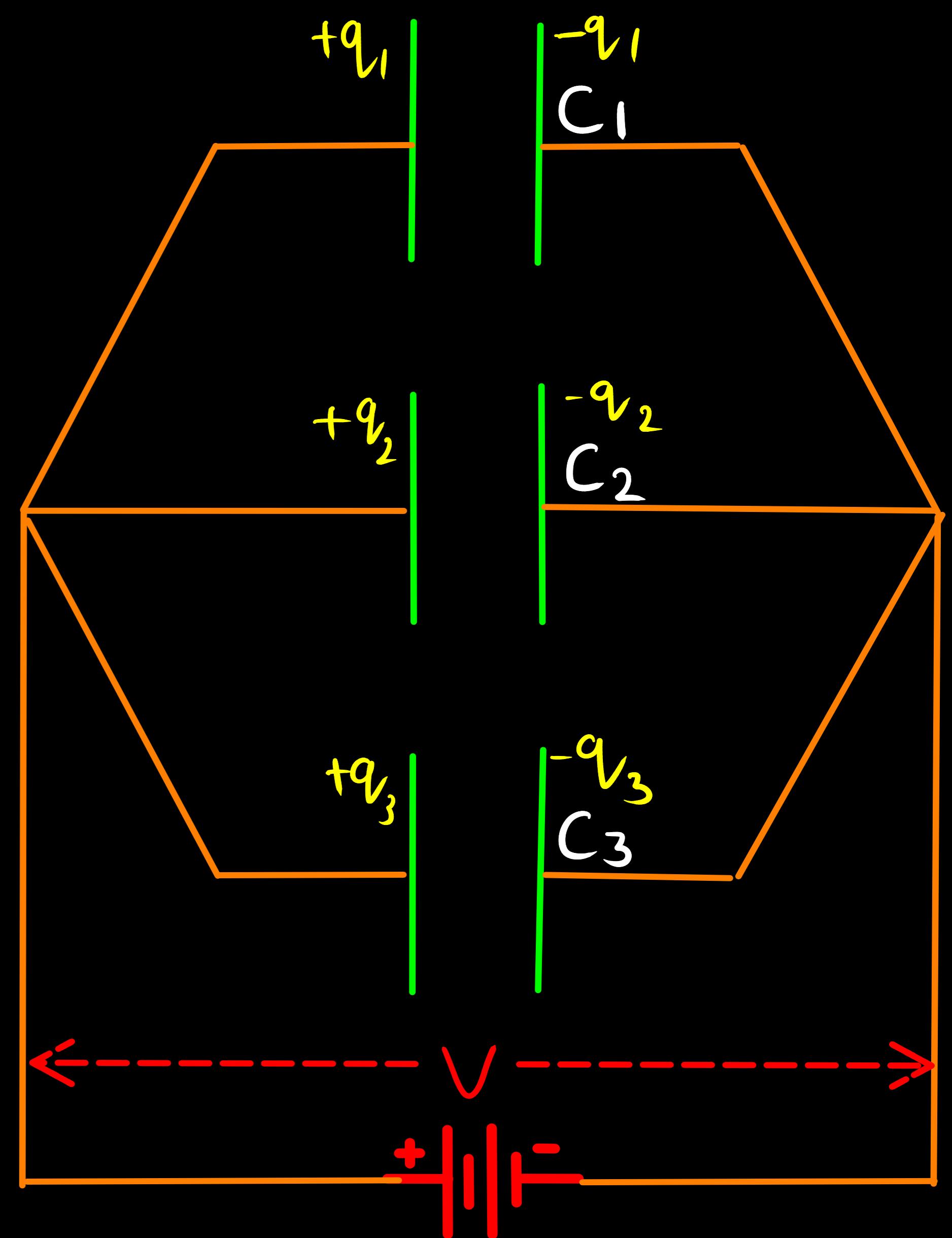
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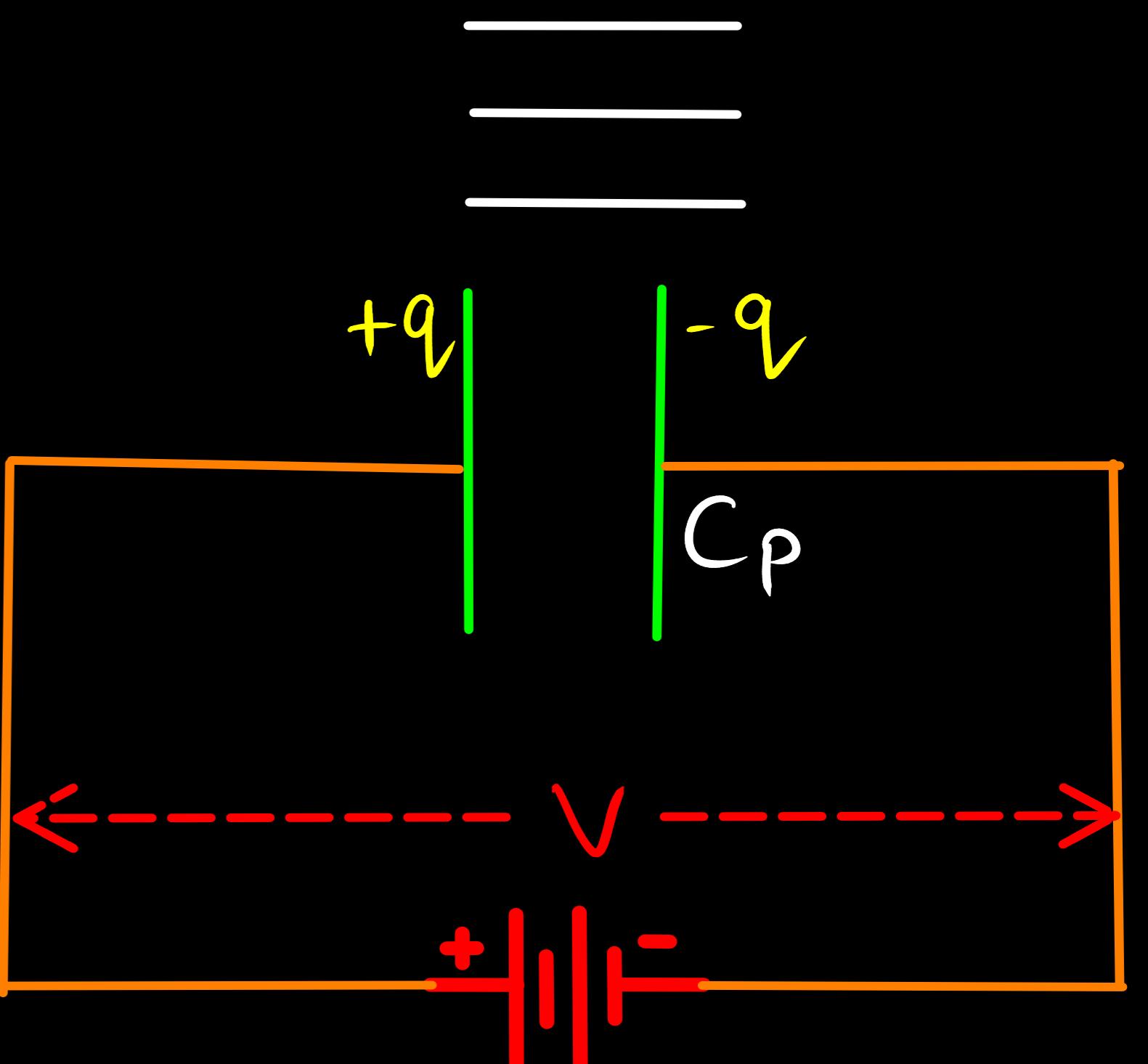
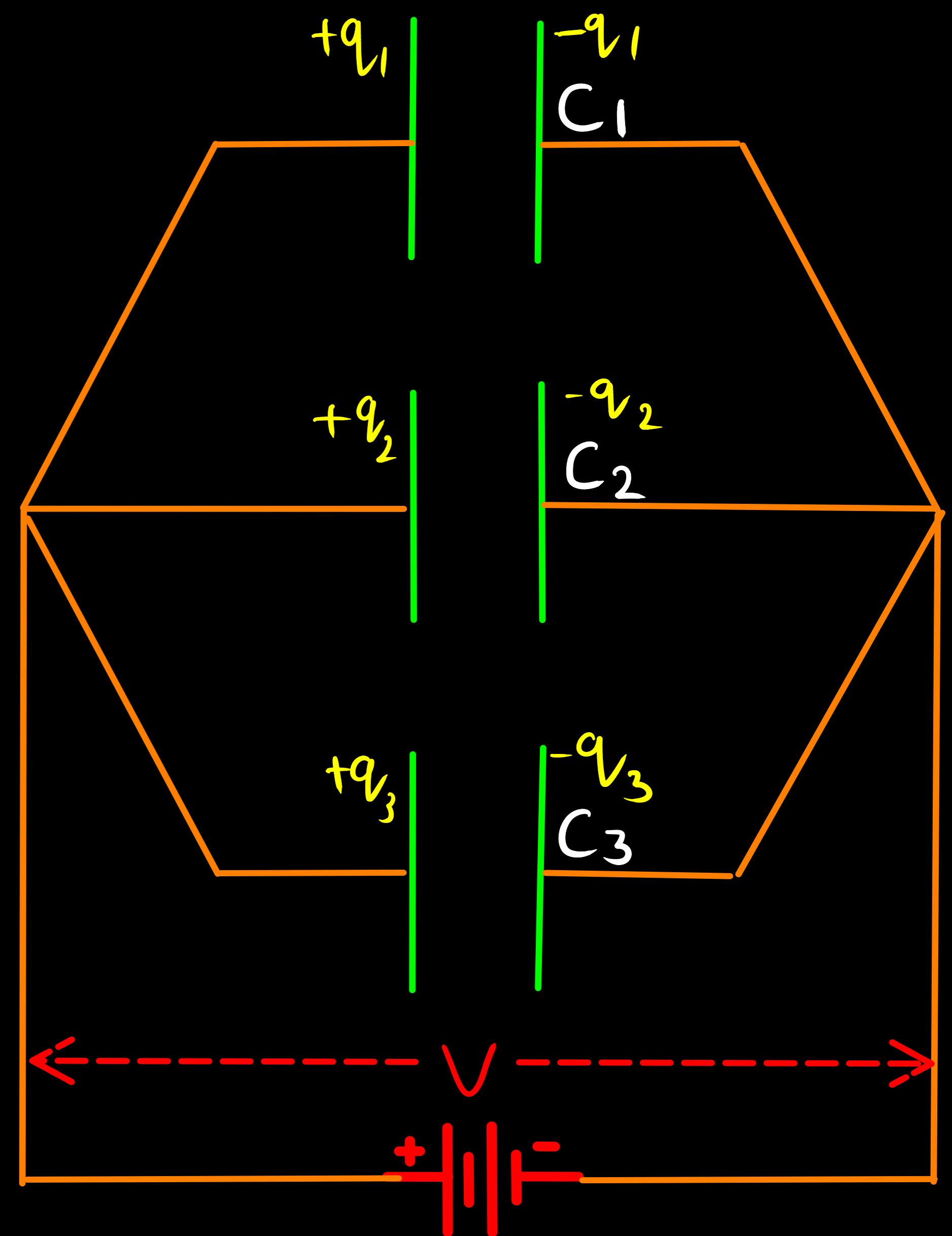
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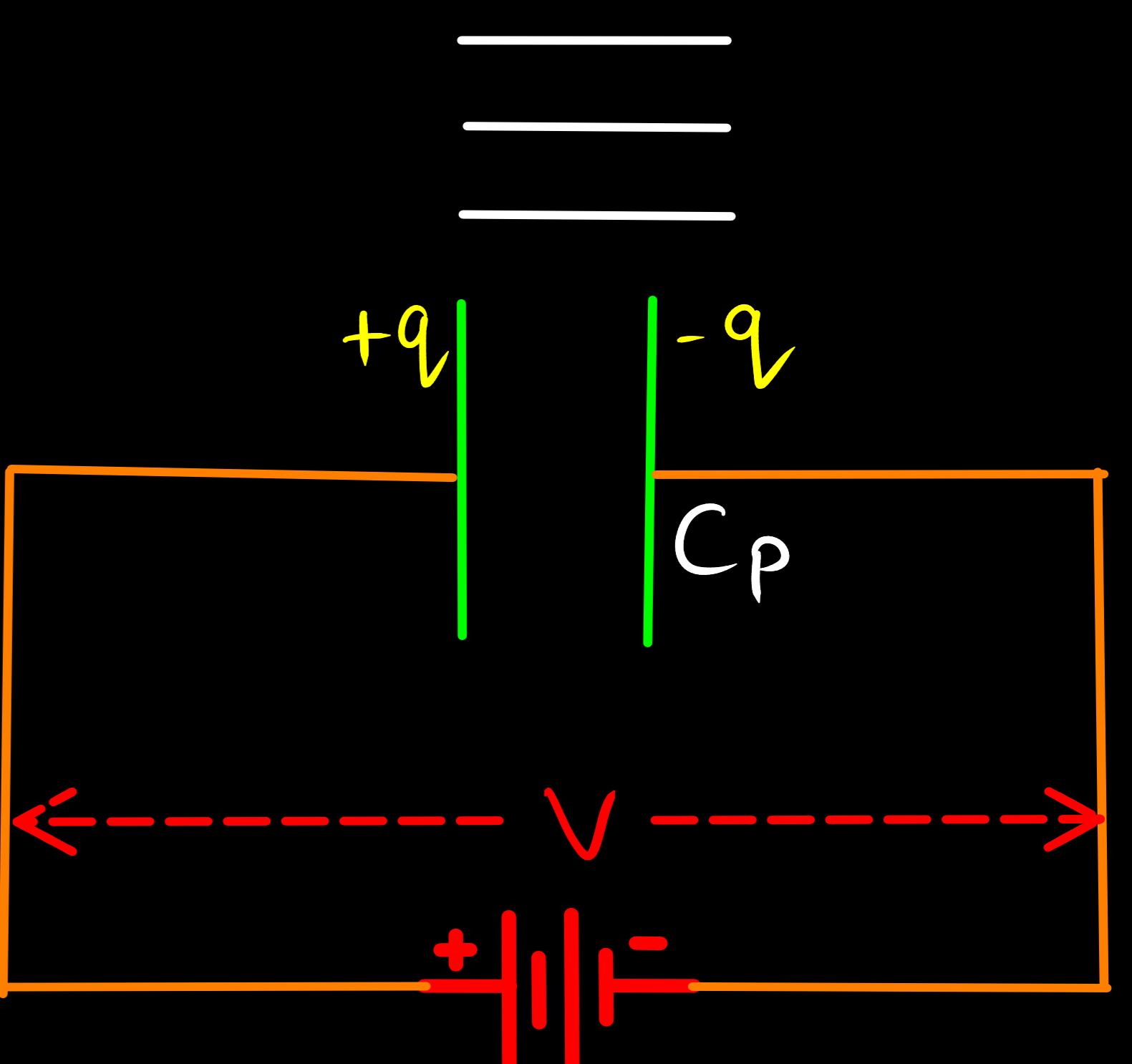
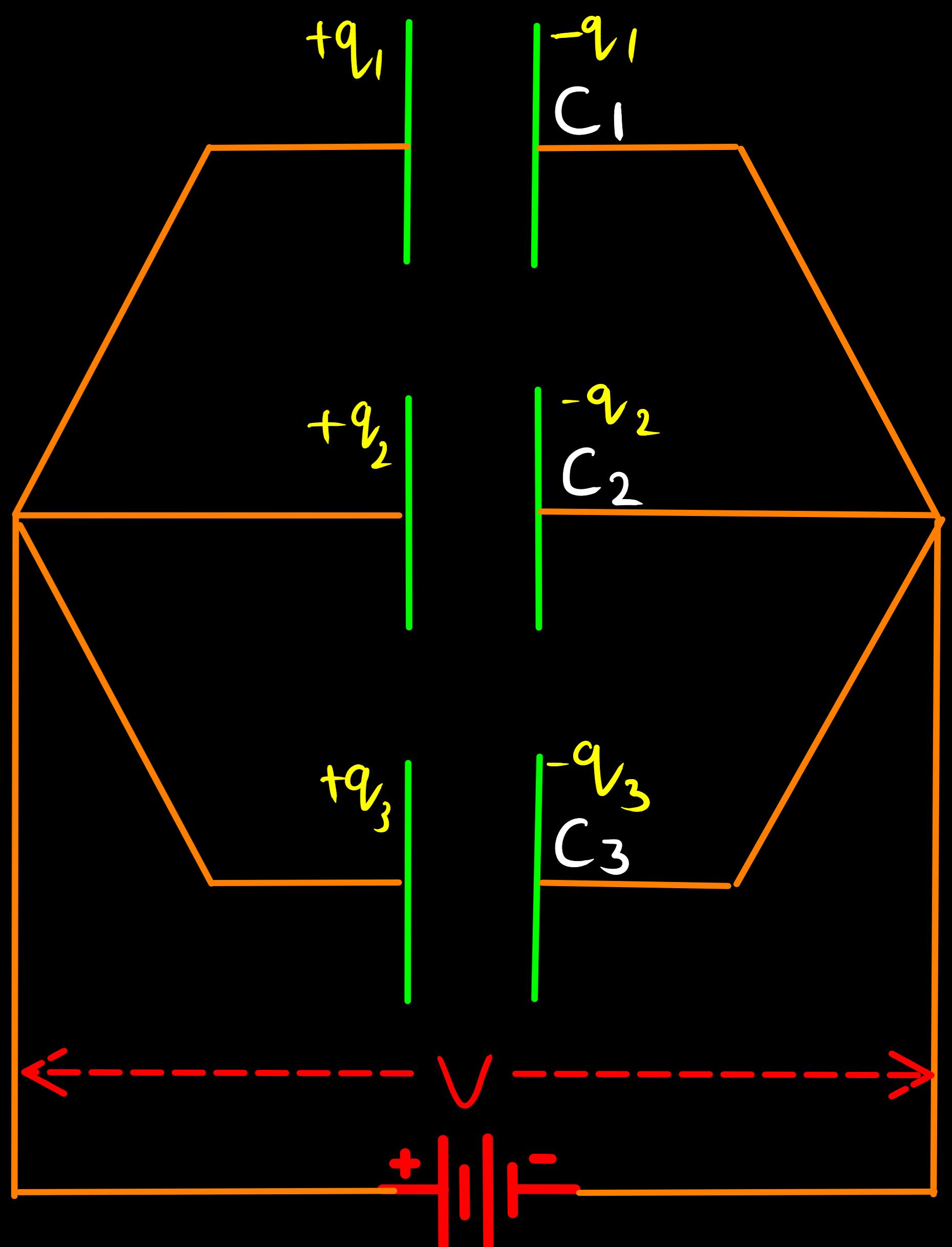
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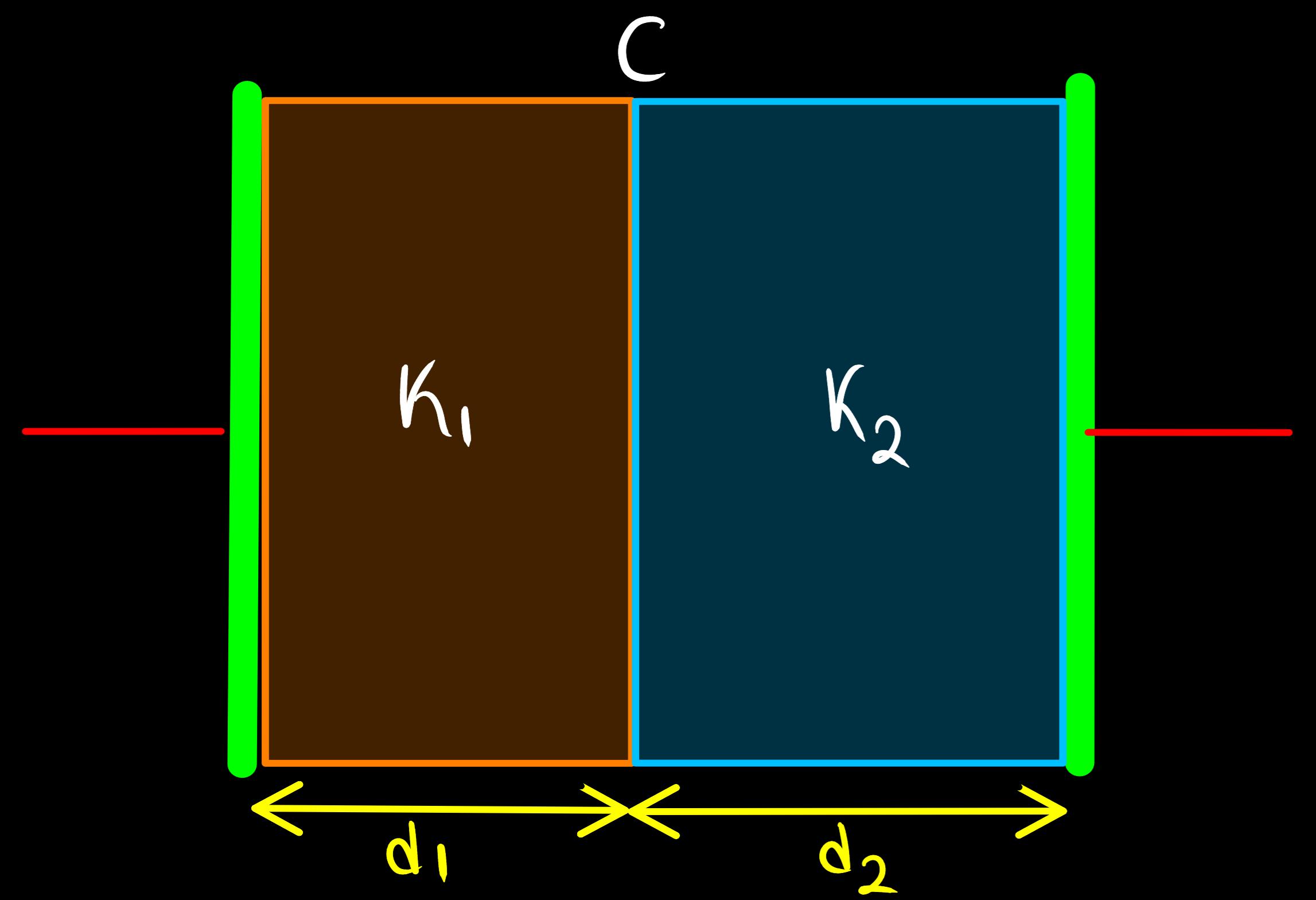
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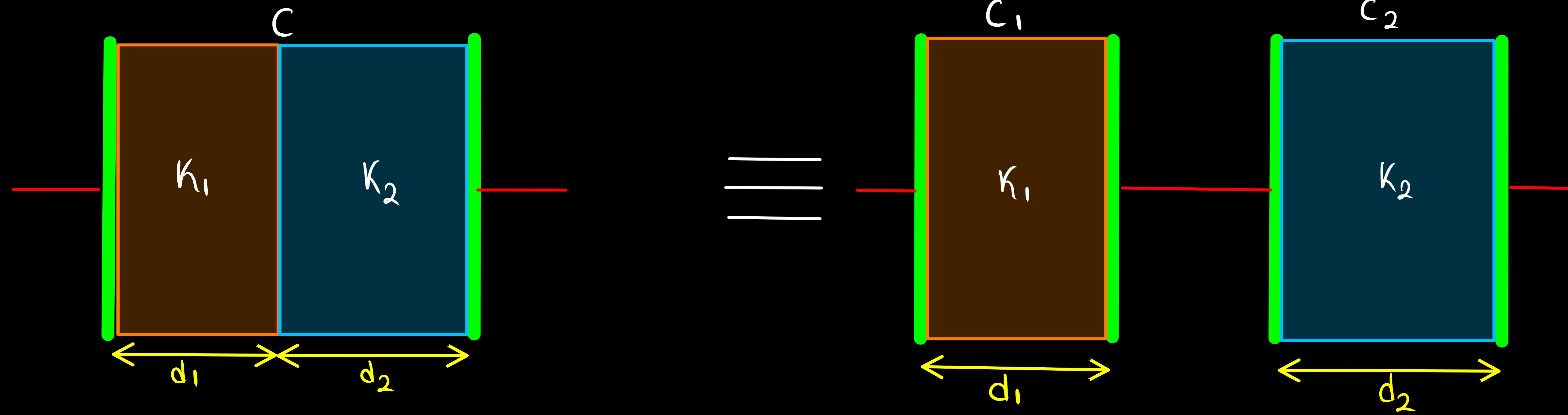
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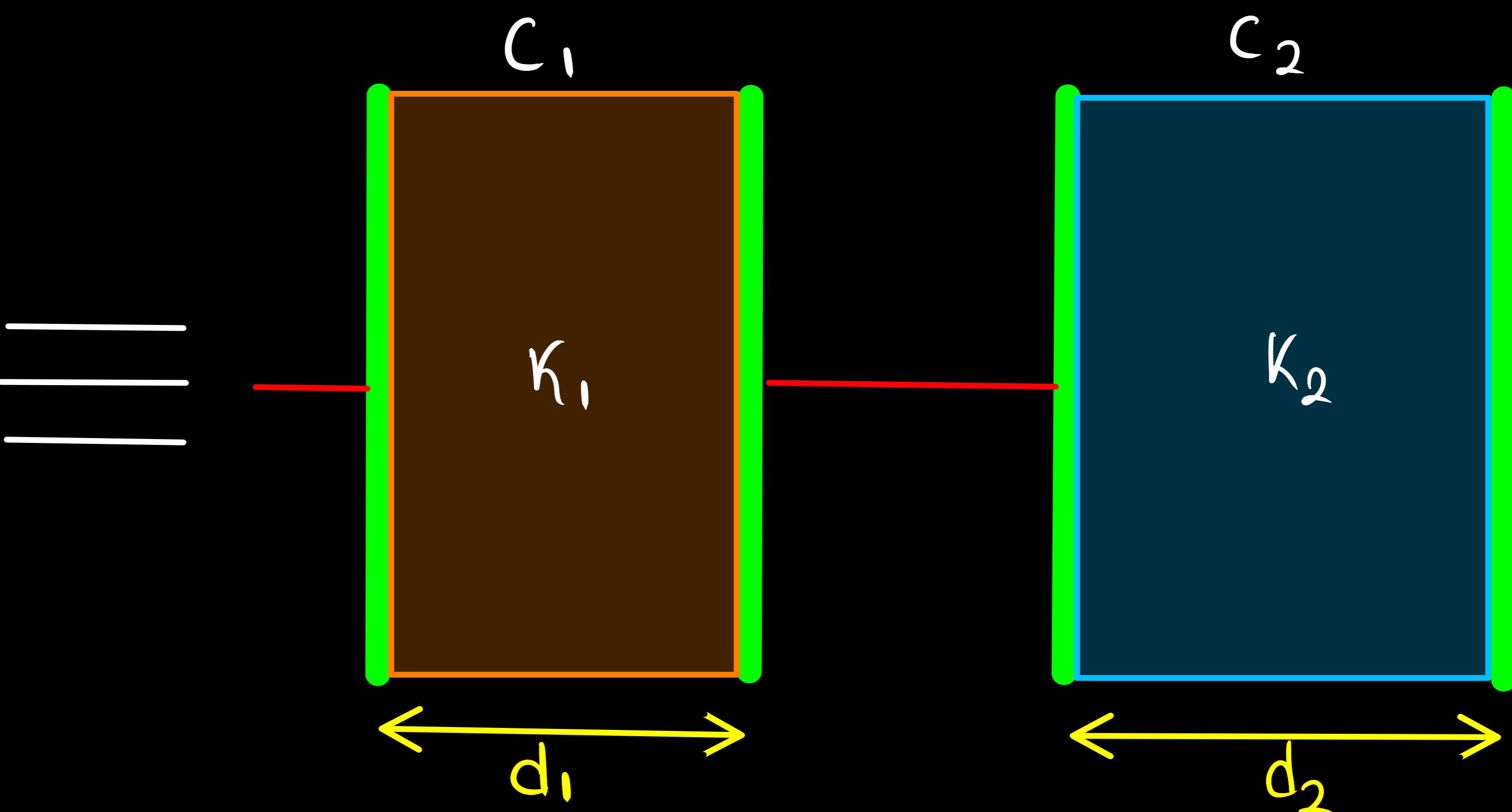
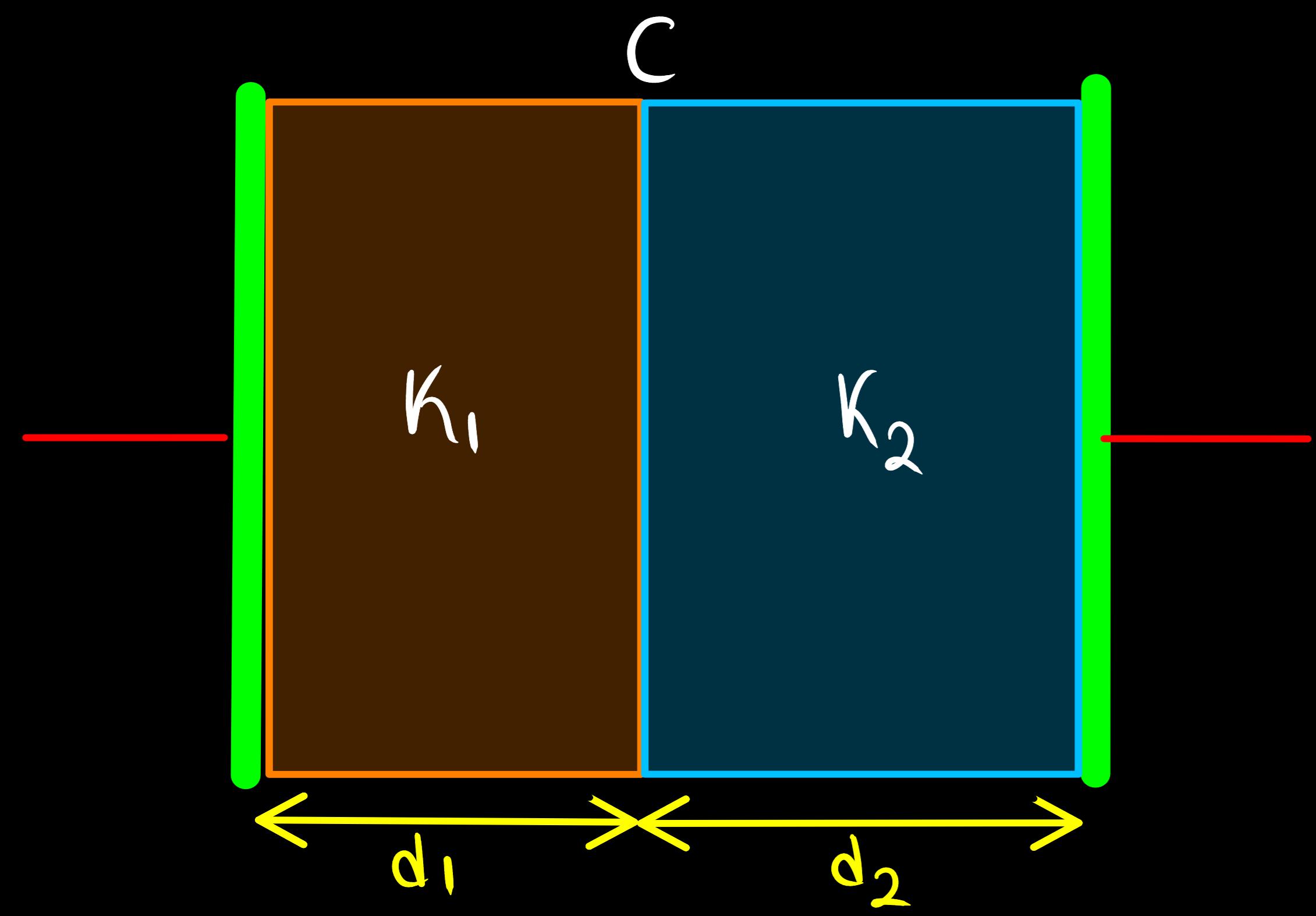
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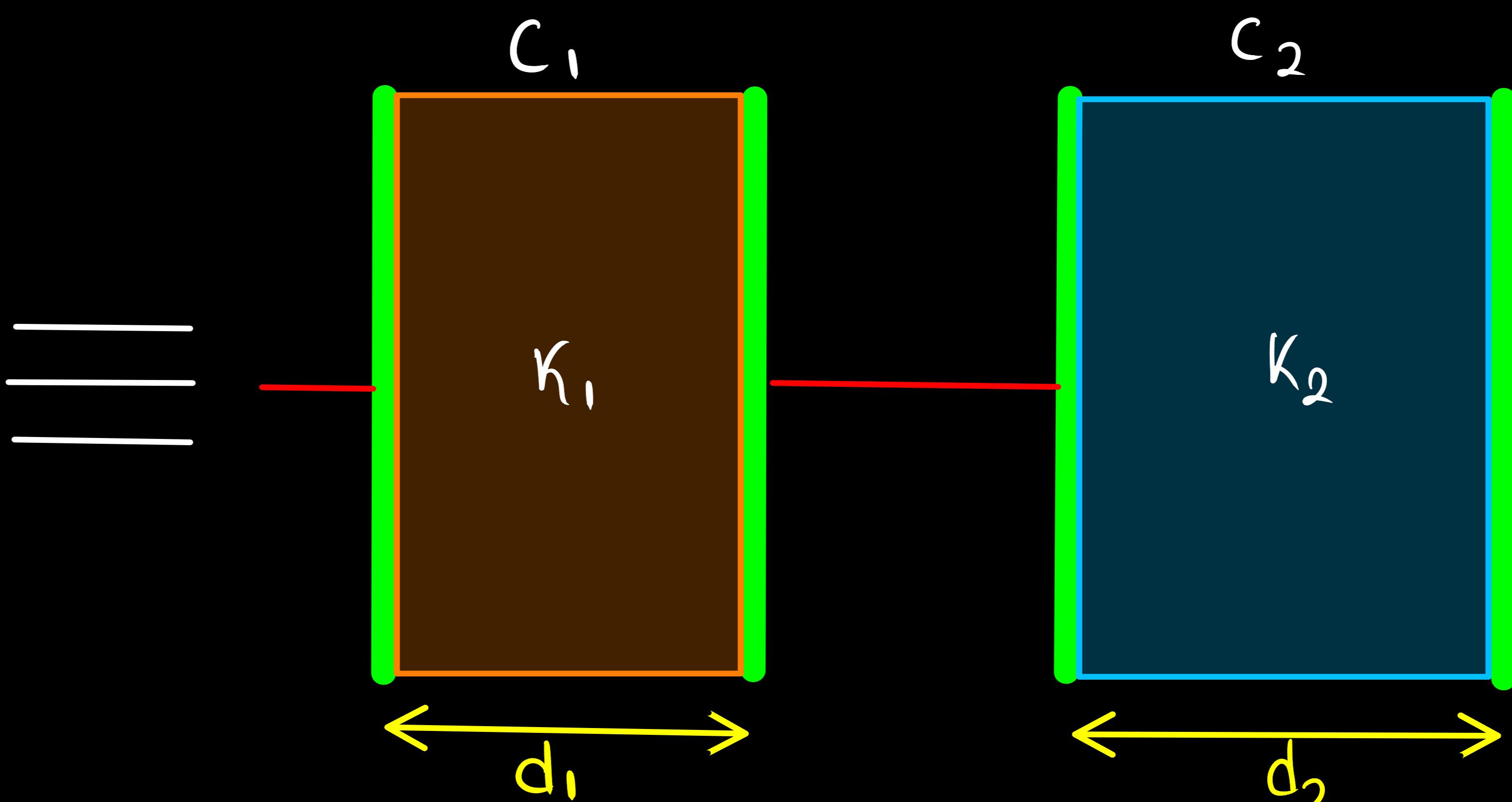
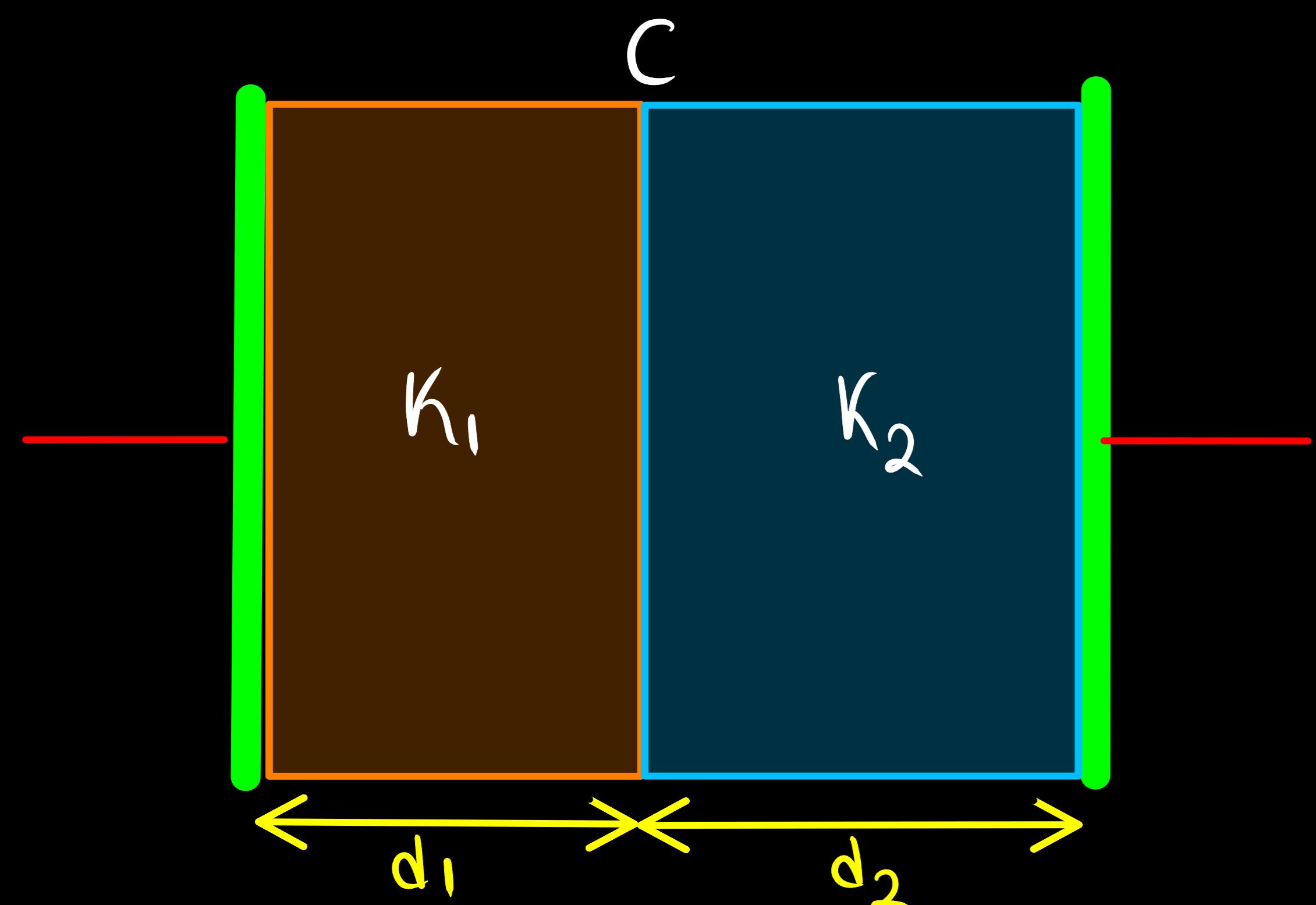


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$$\frac{1}{C} = \frac{1}{C_1} + \frac{1}{C_2}$$
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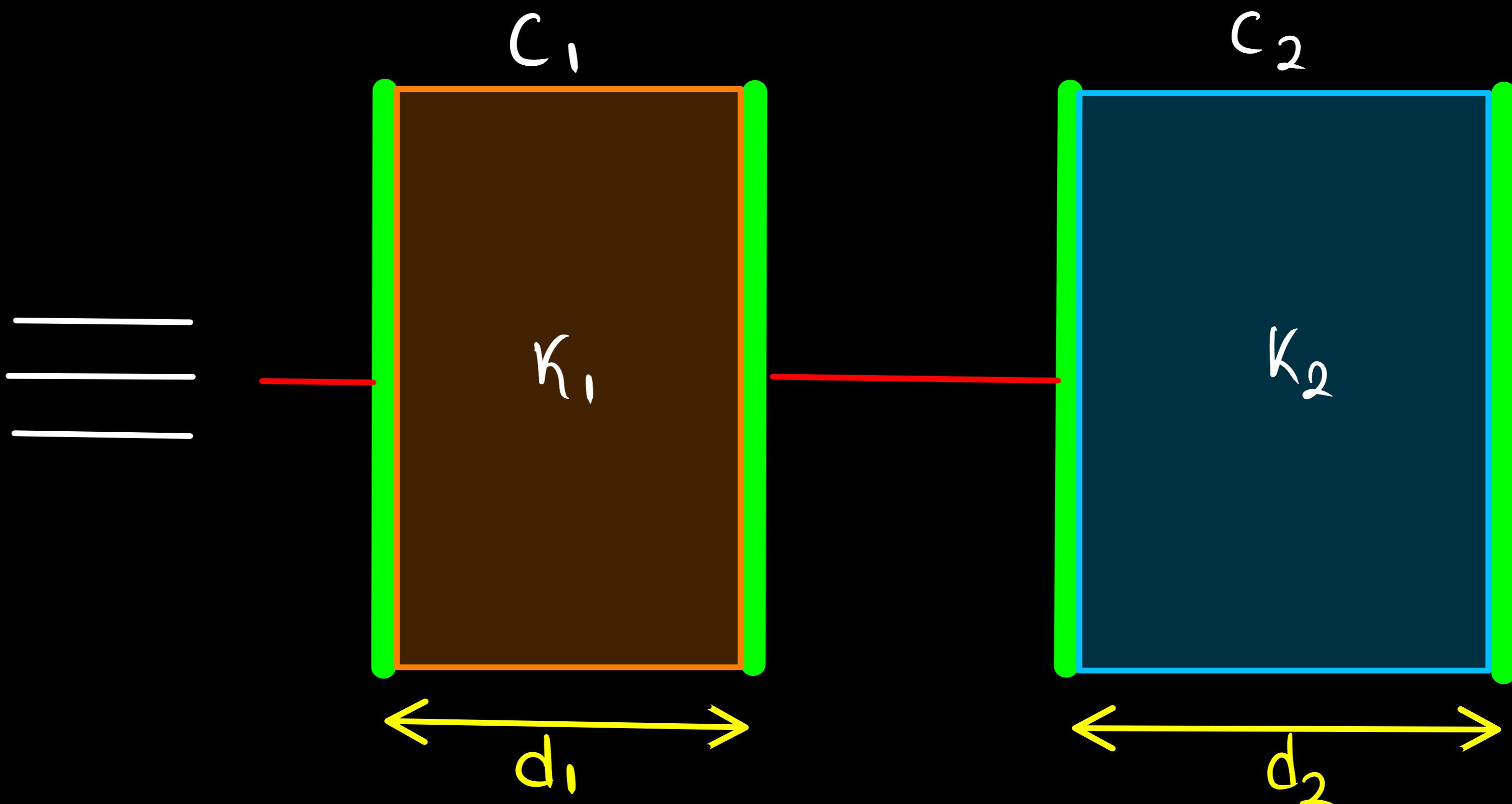
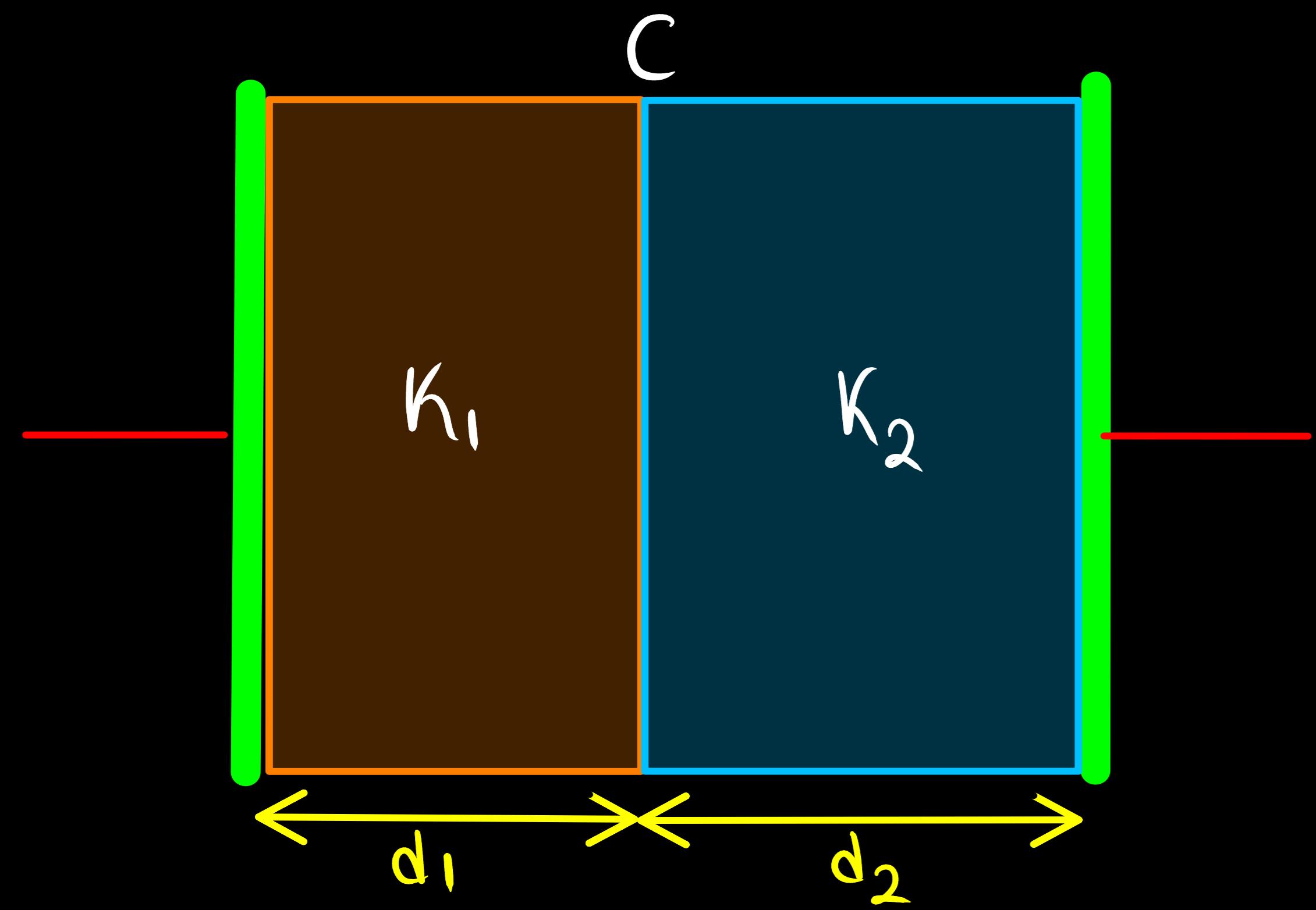
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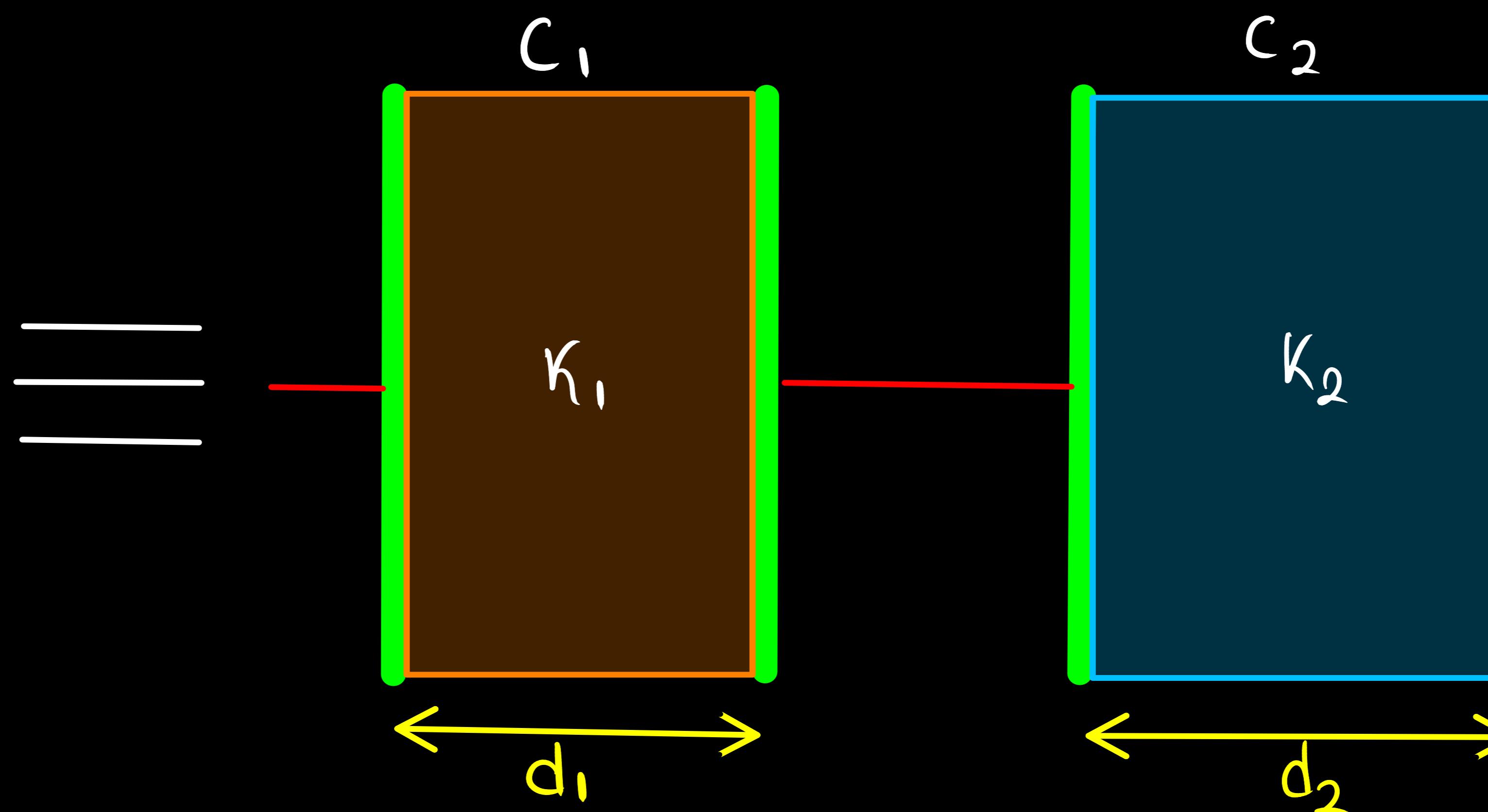
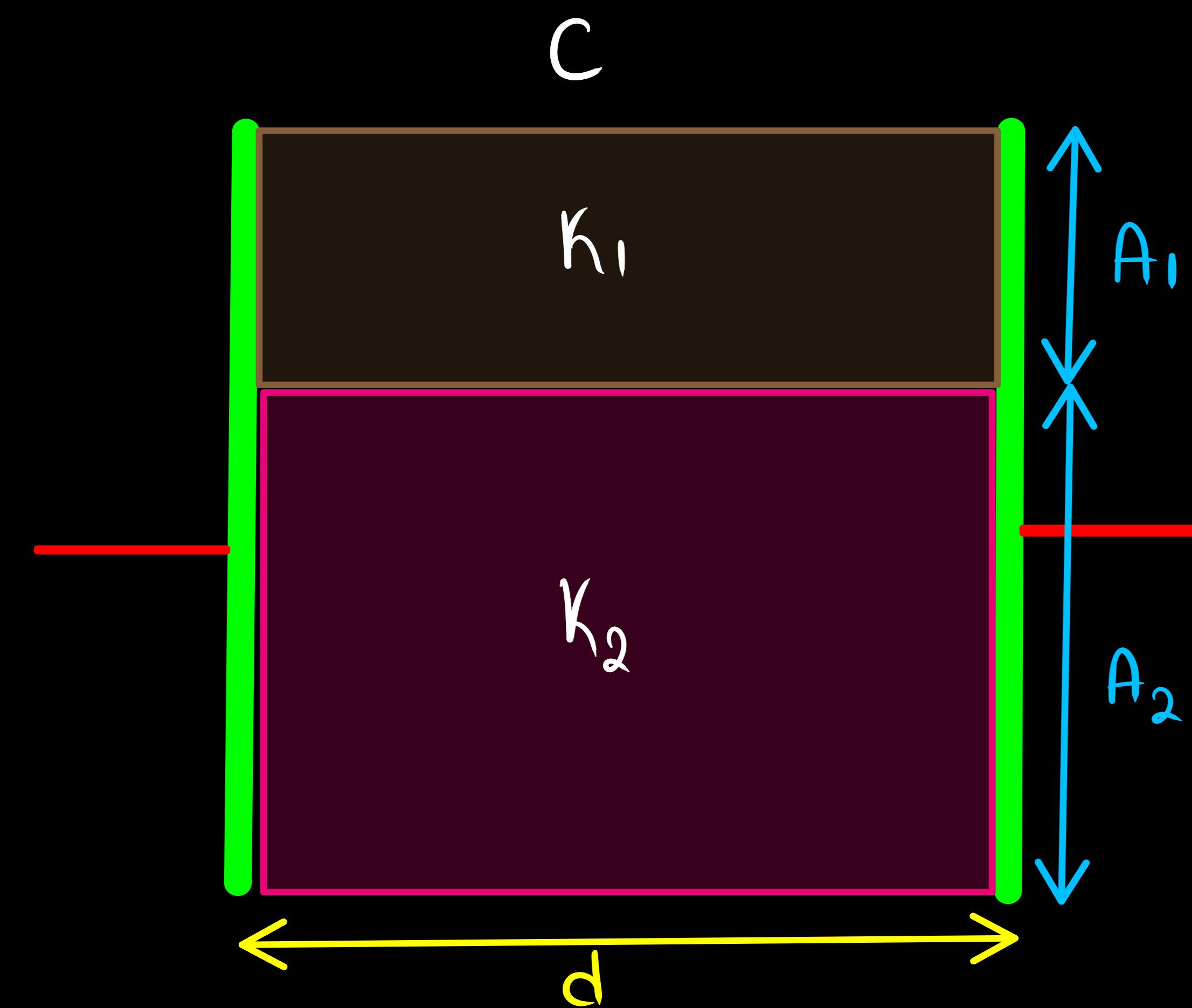
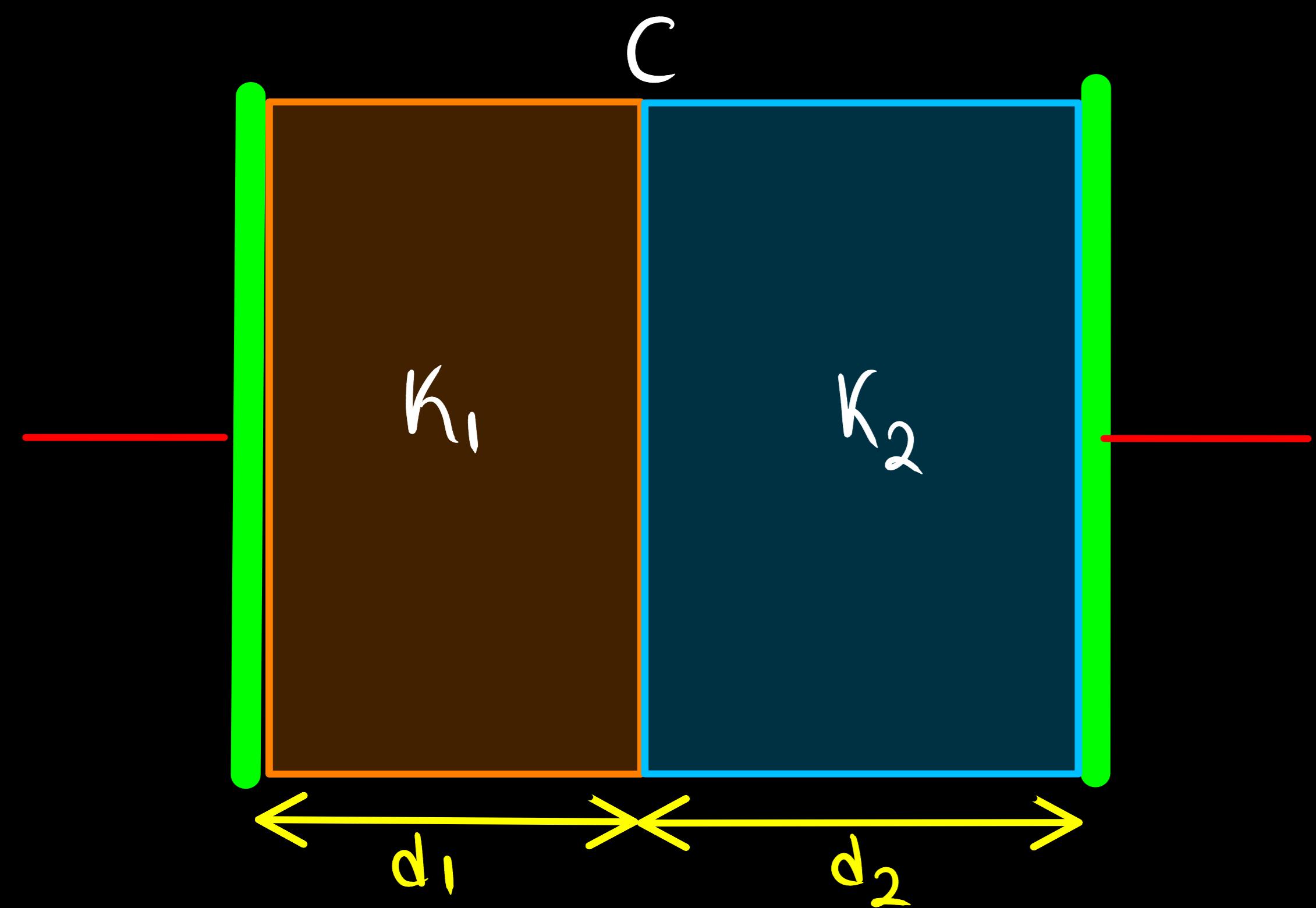
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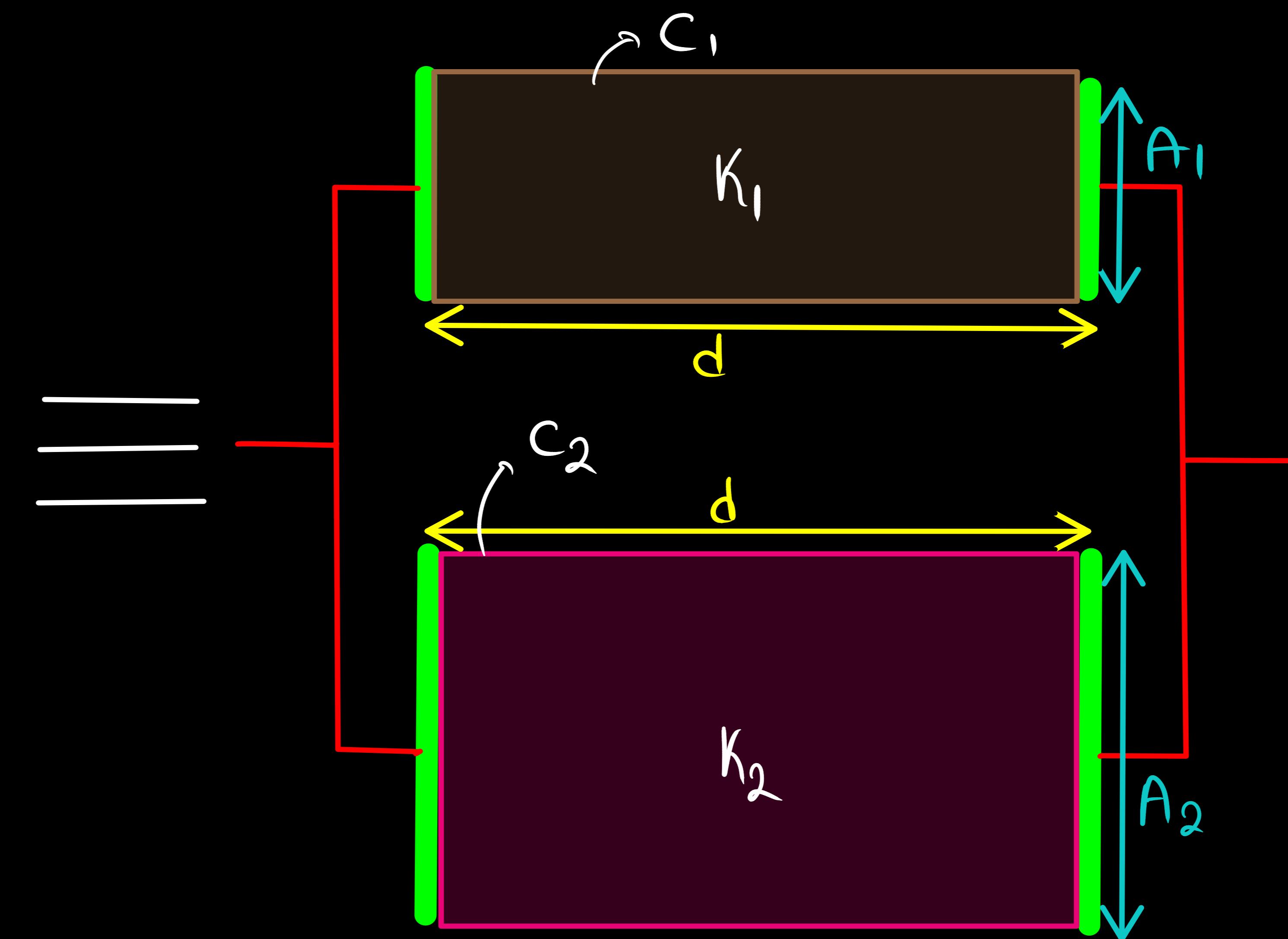
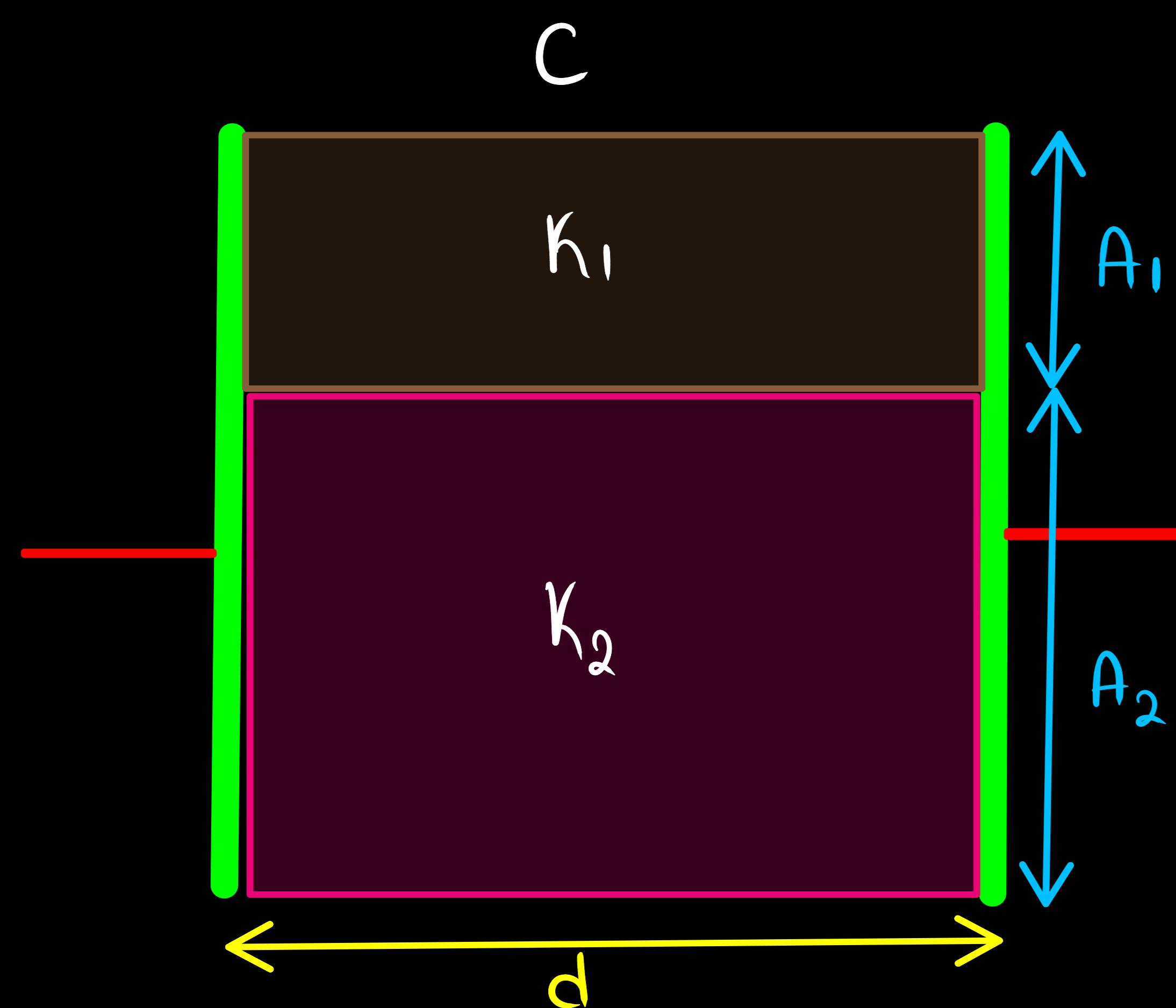
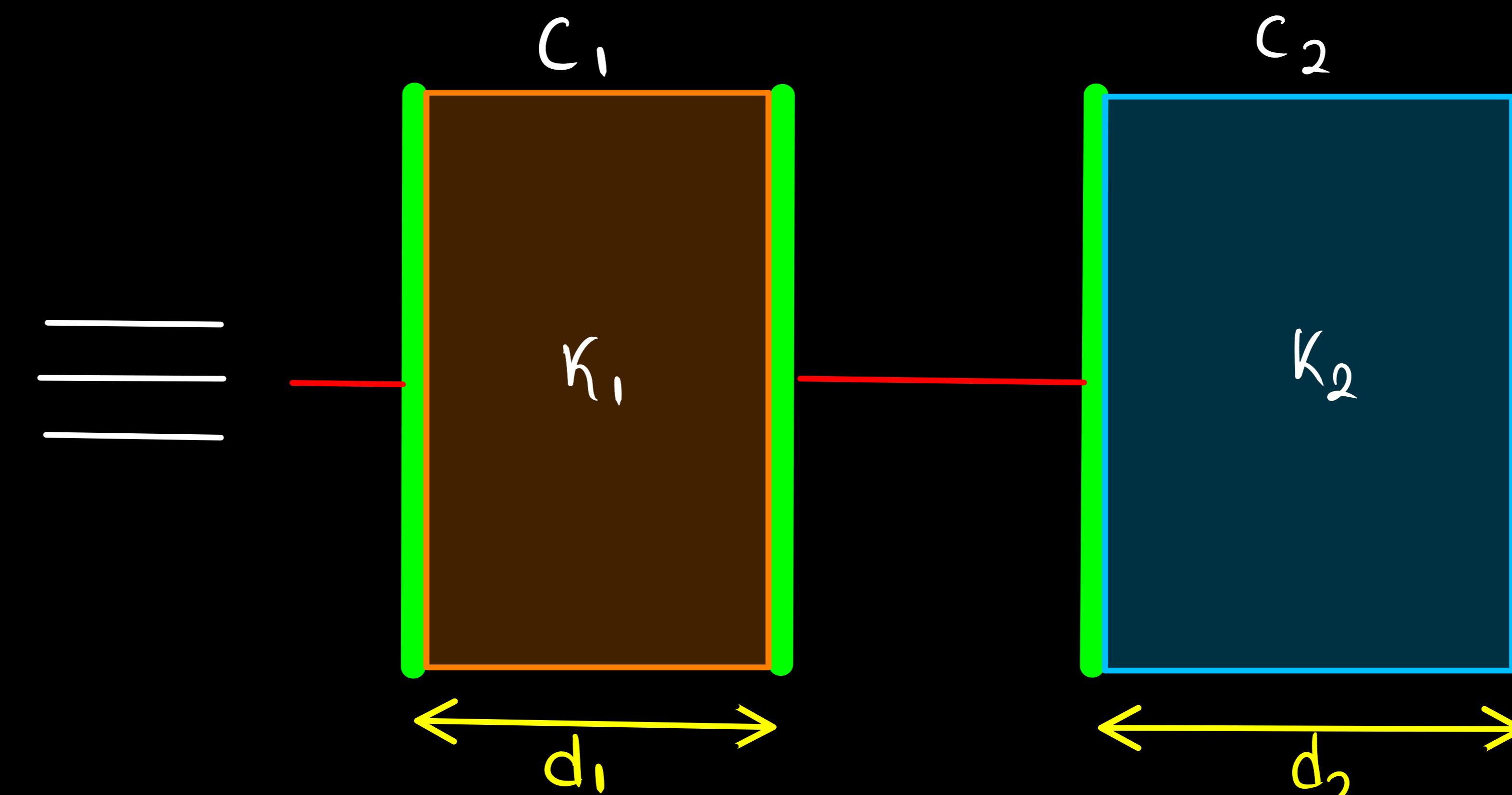
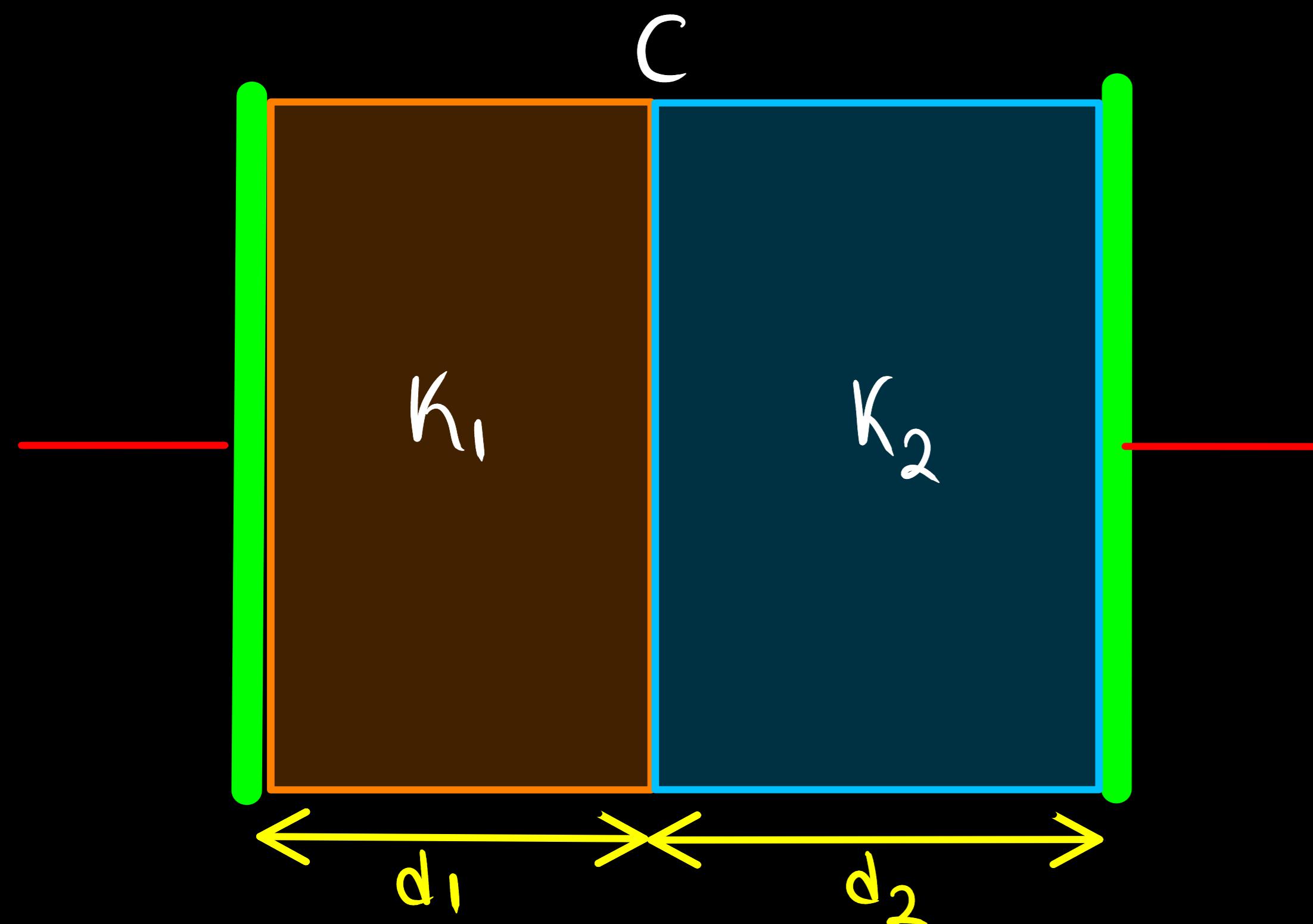
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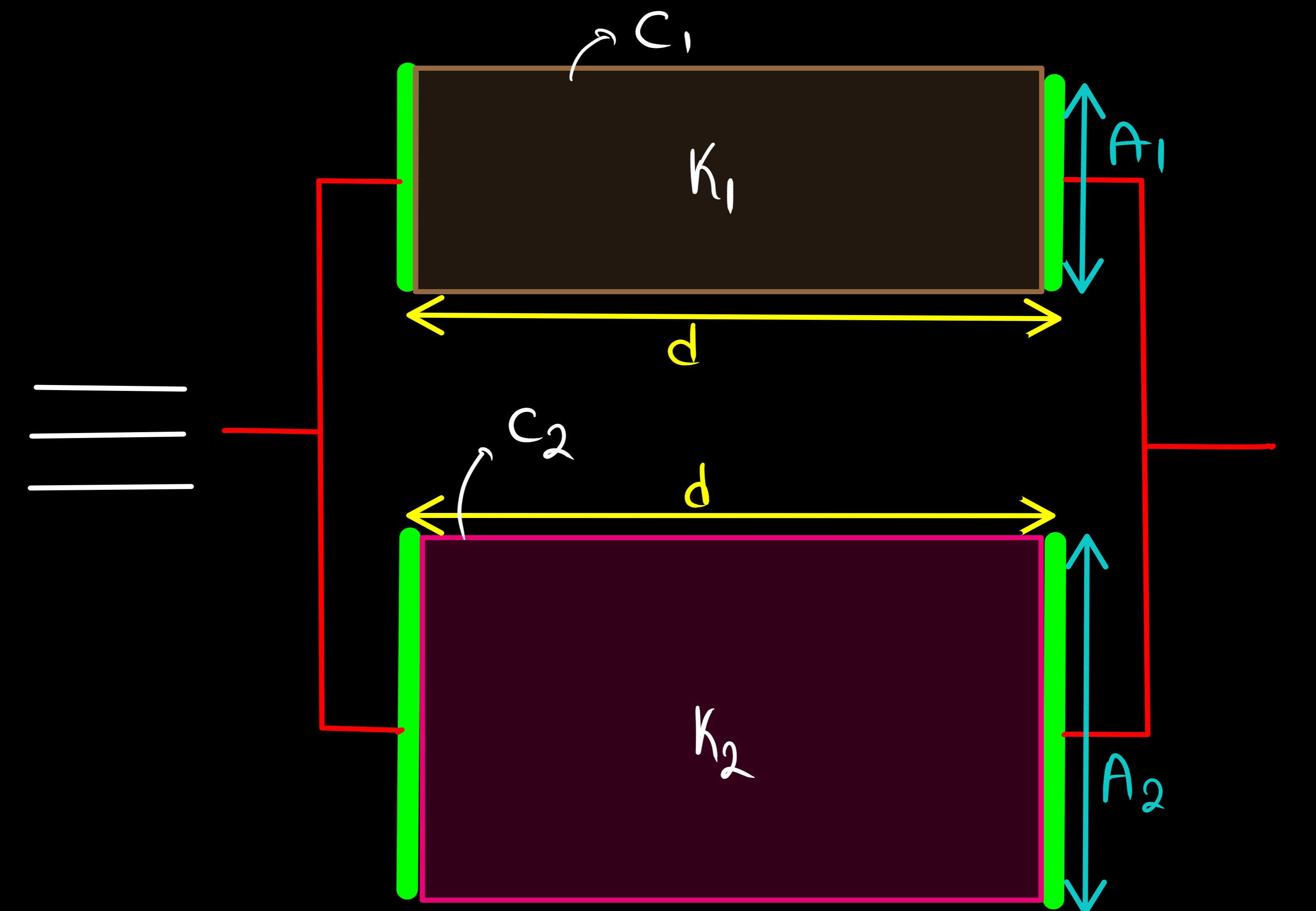
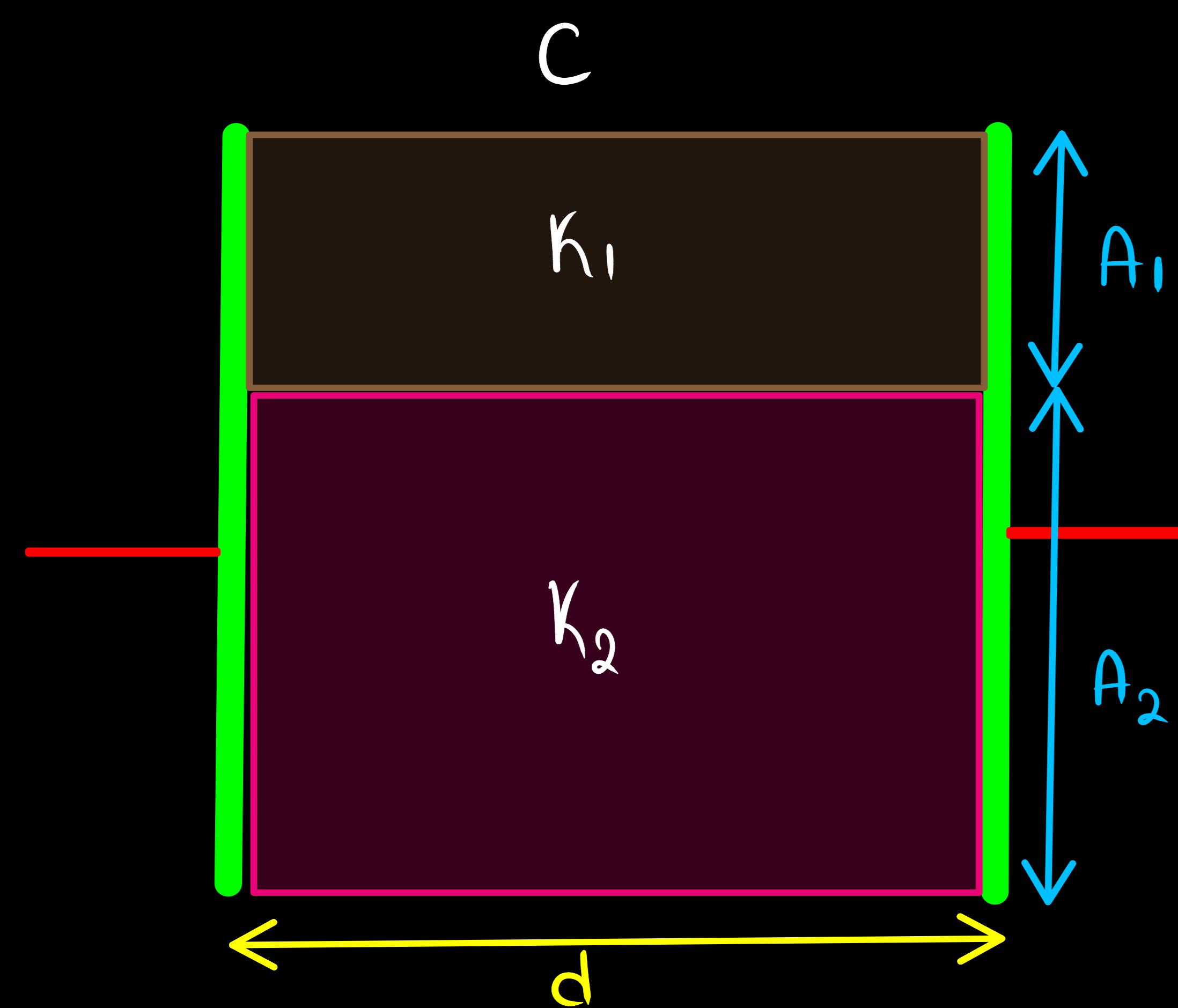
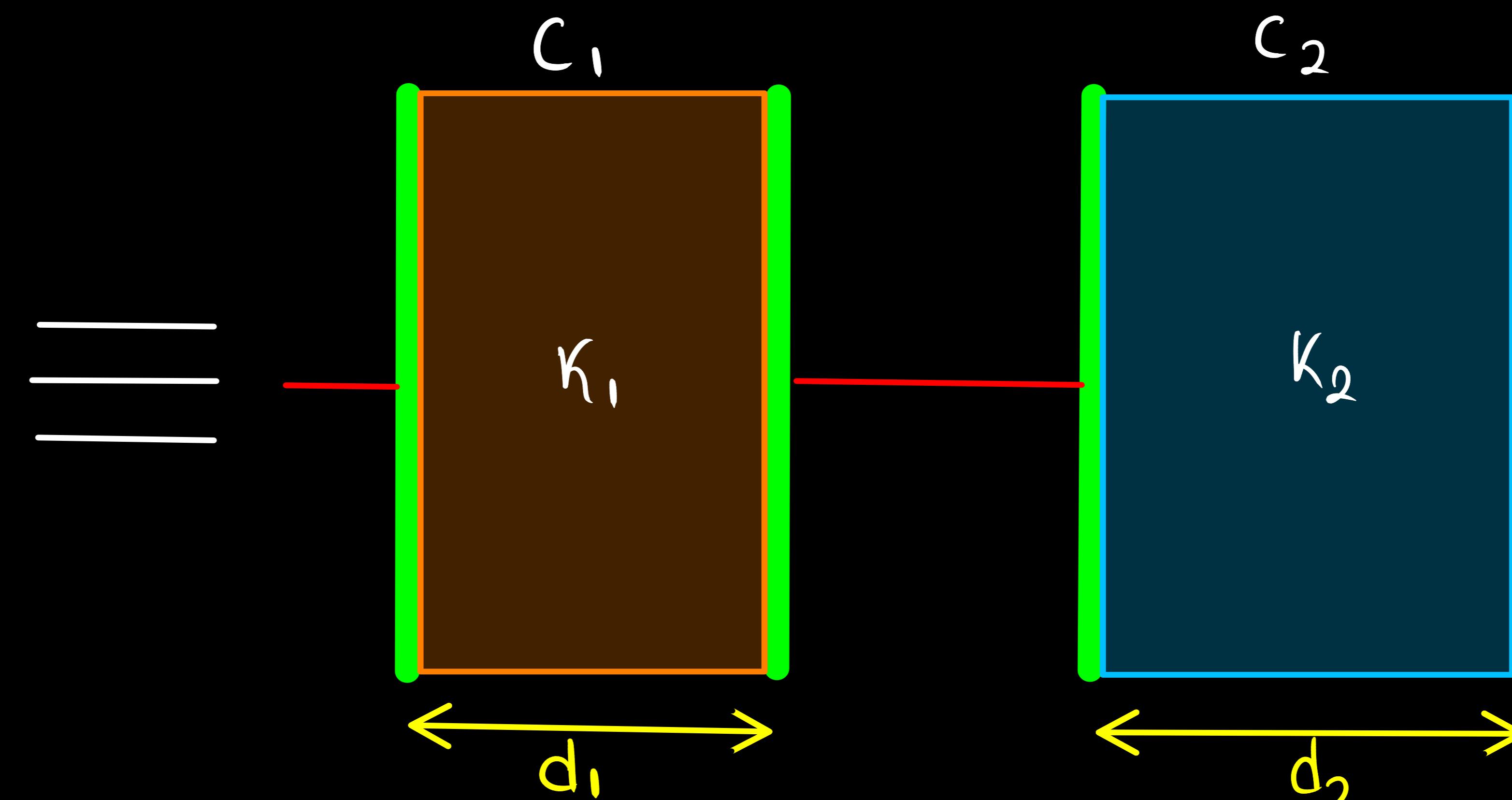
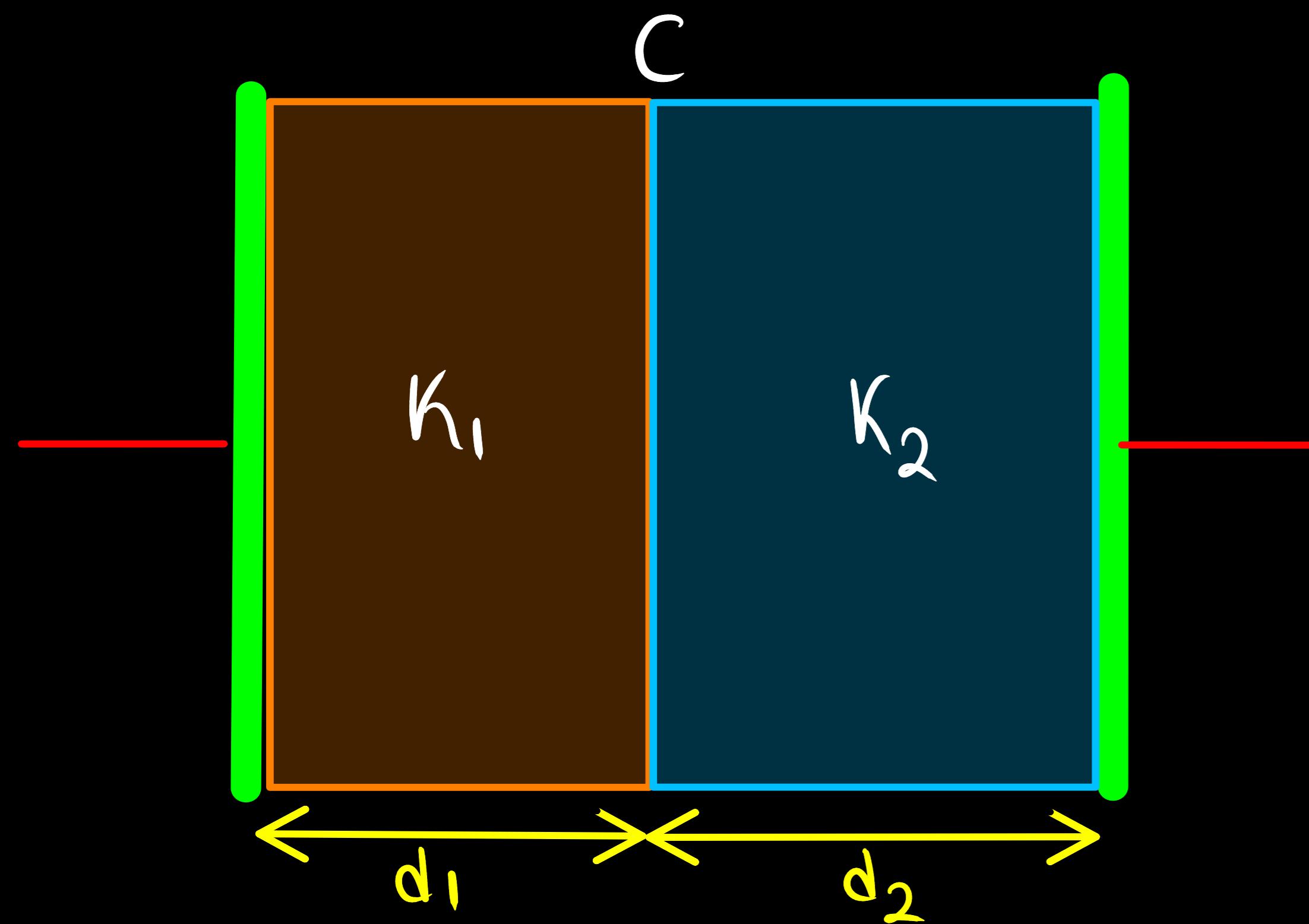
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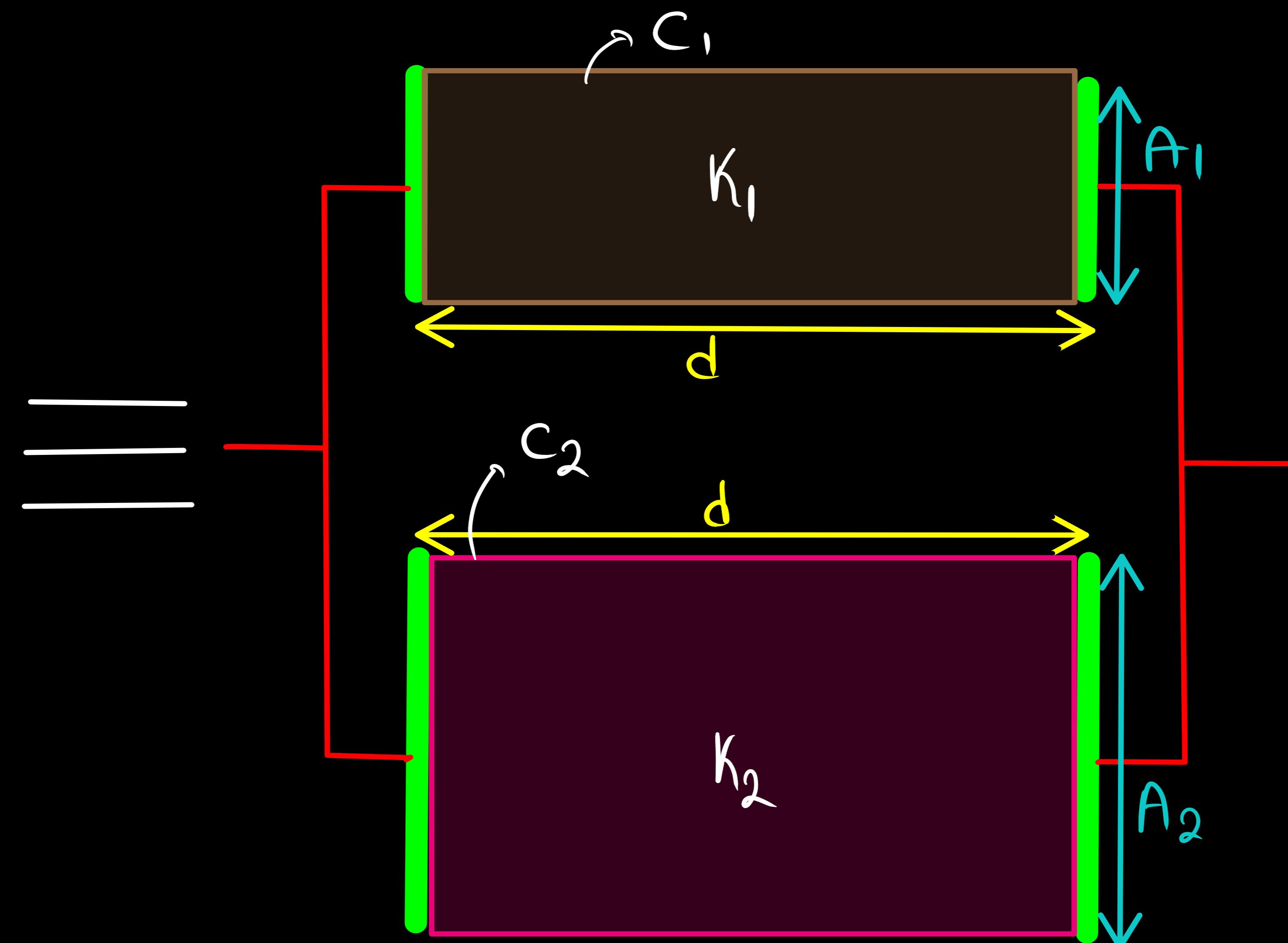
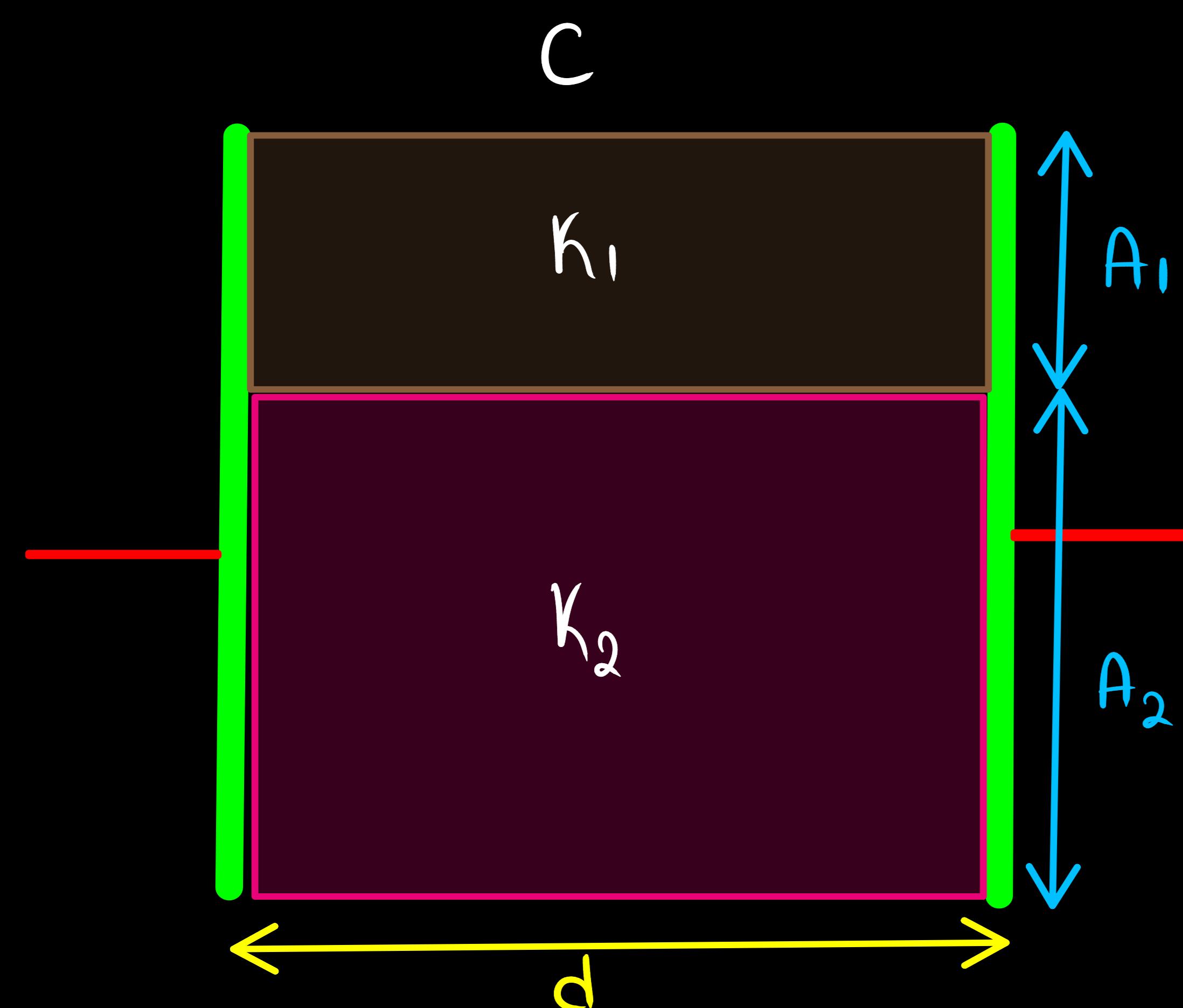
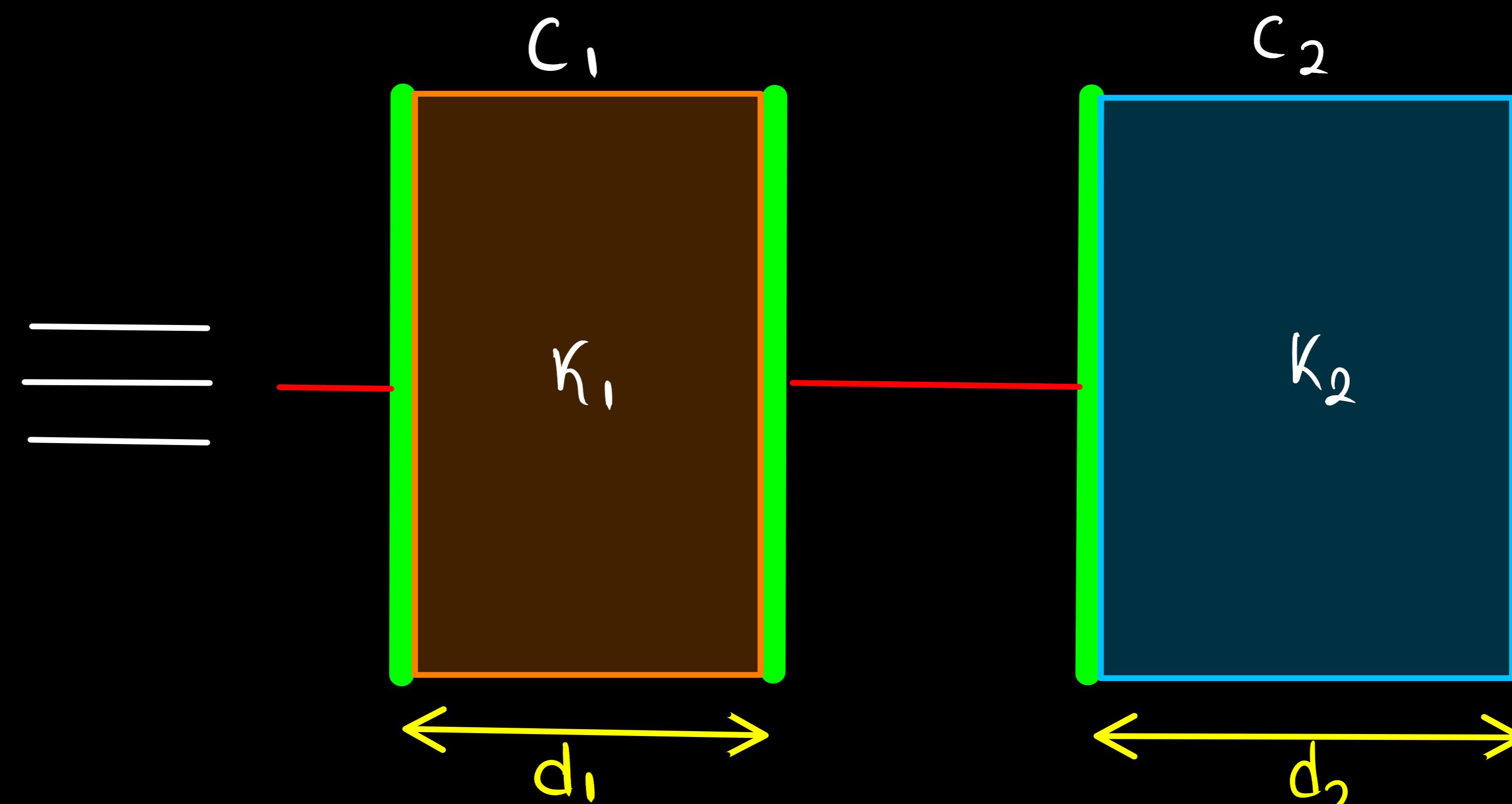
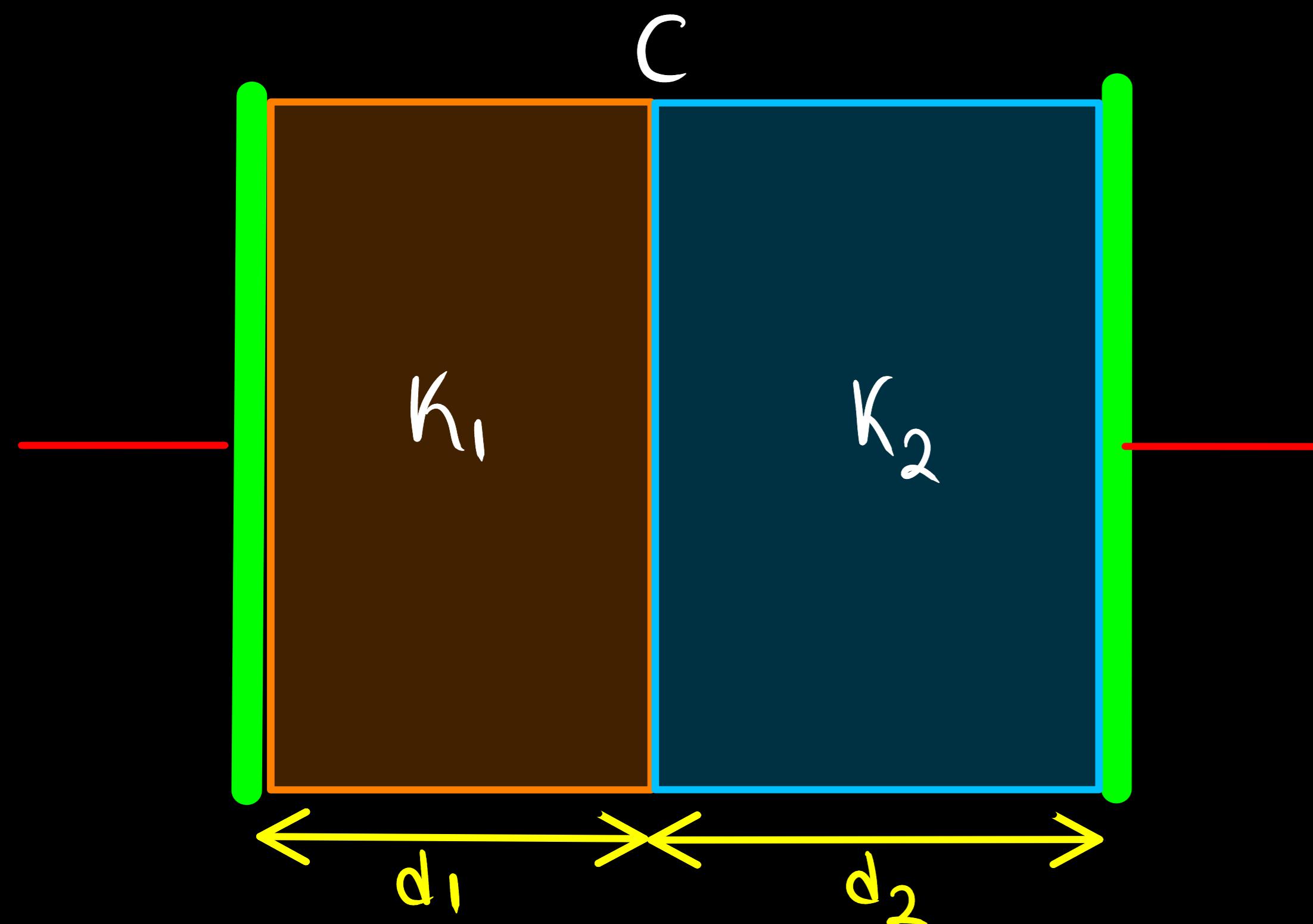
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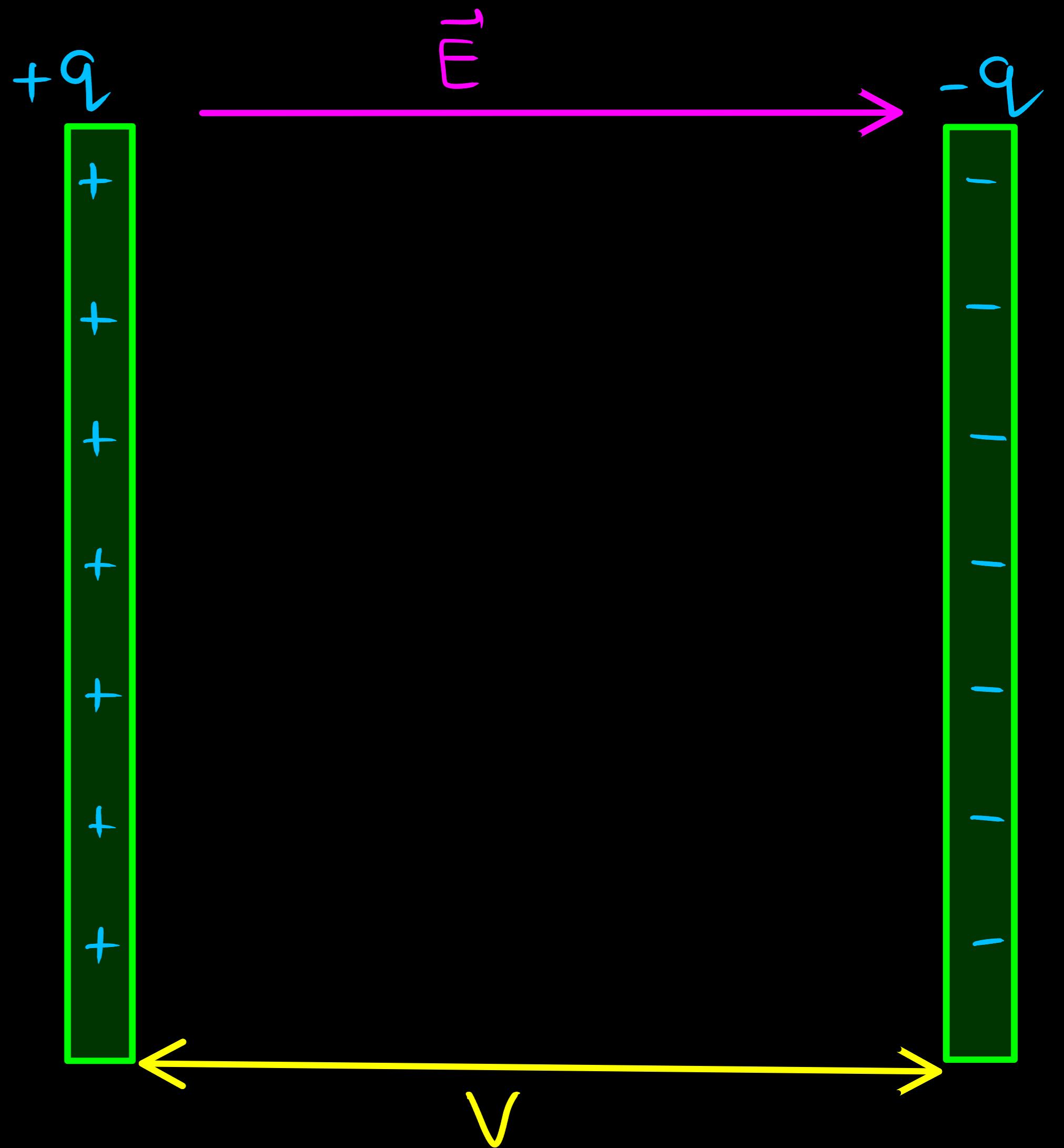
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Energy Stored in a Capacitor

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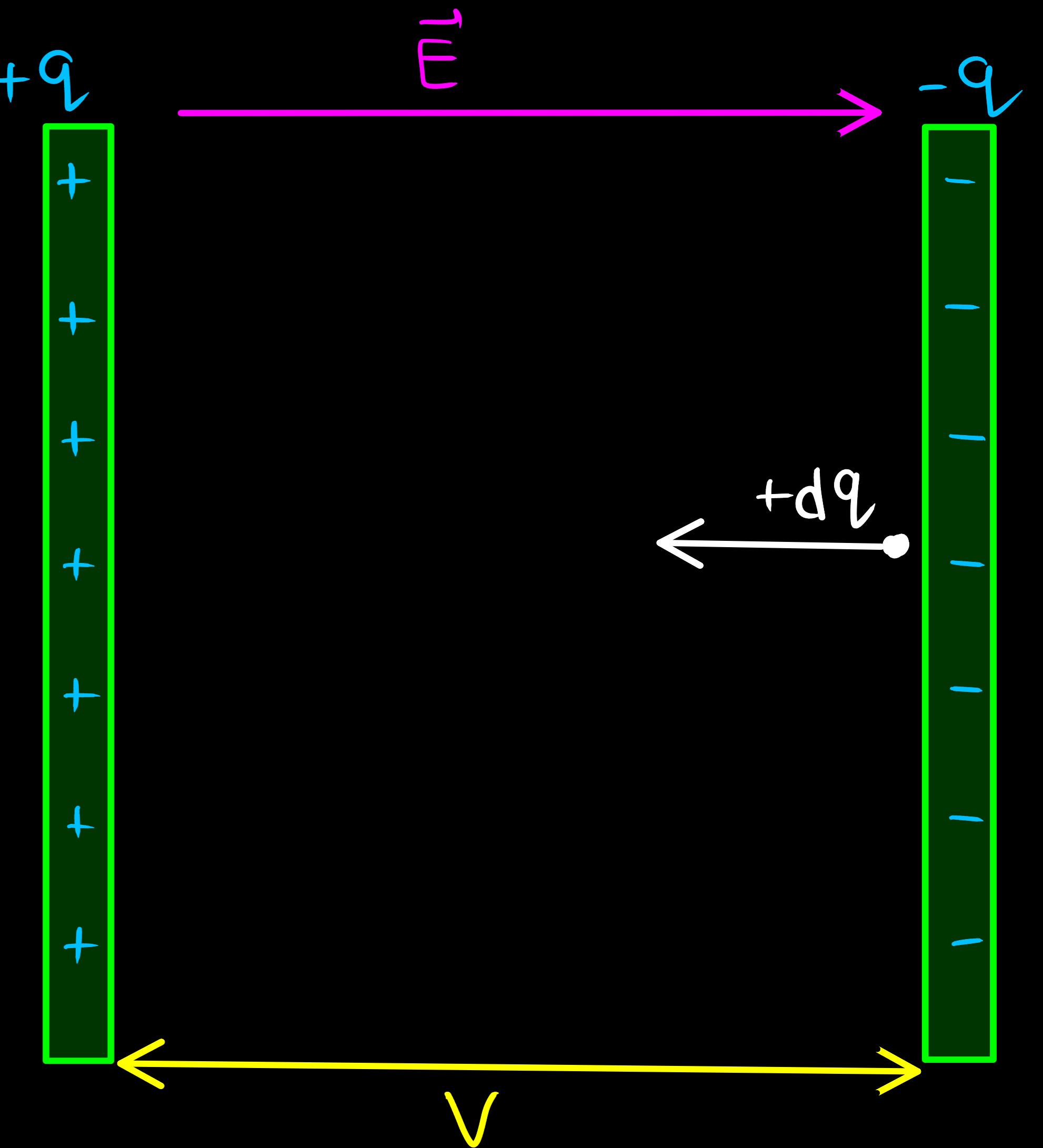


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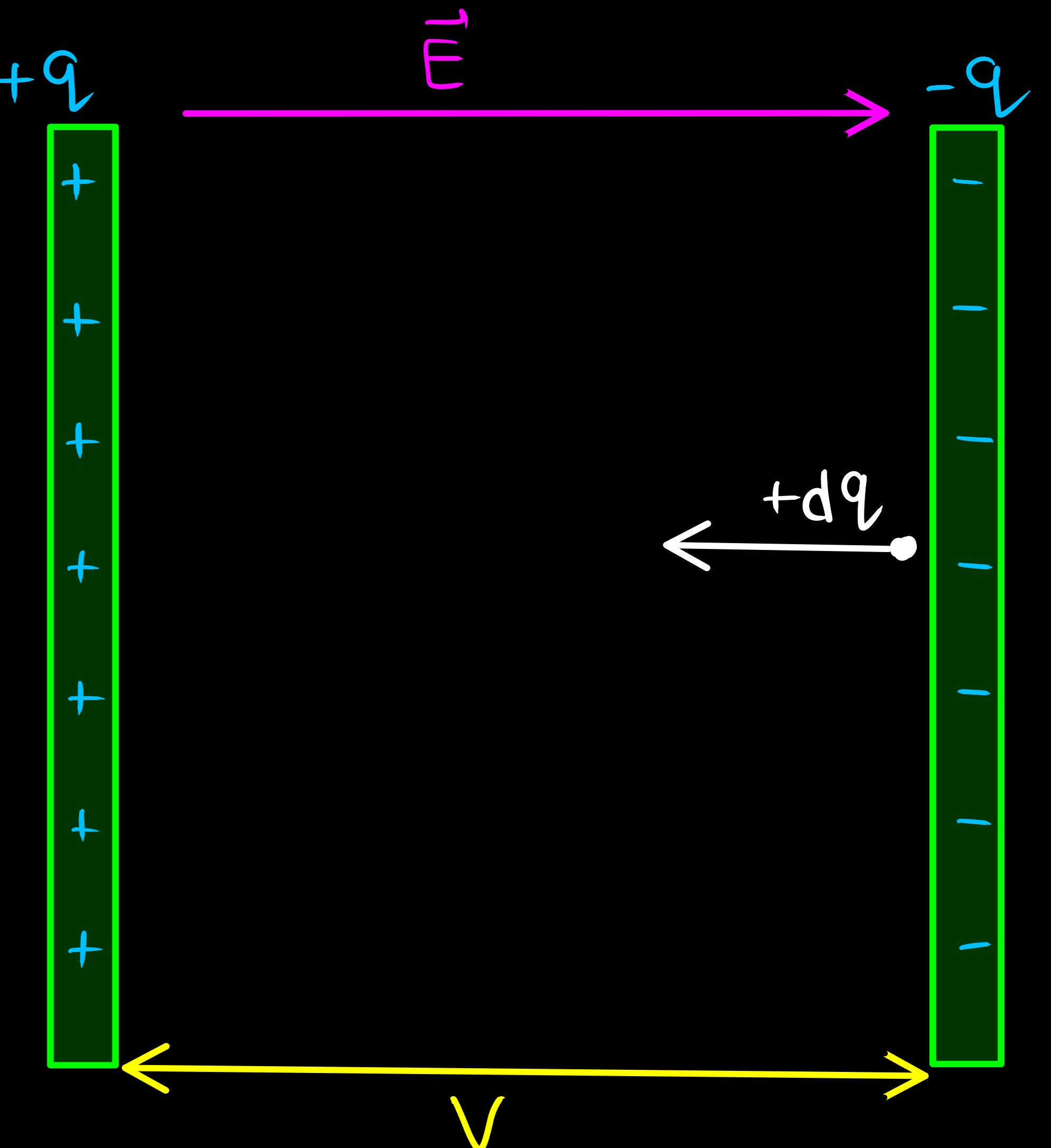
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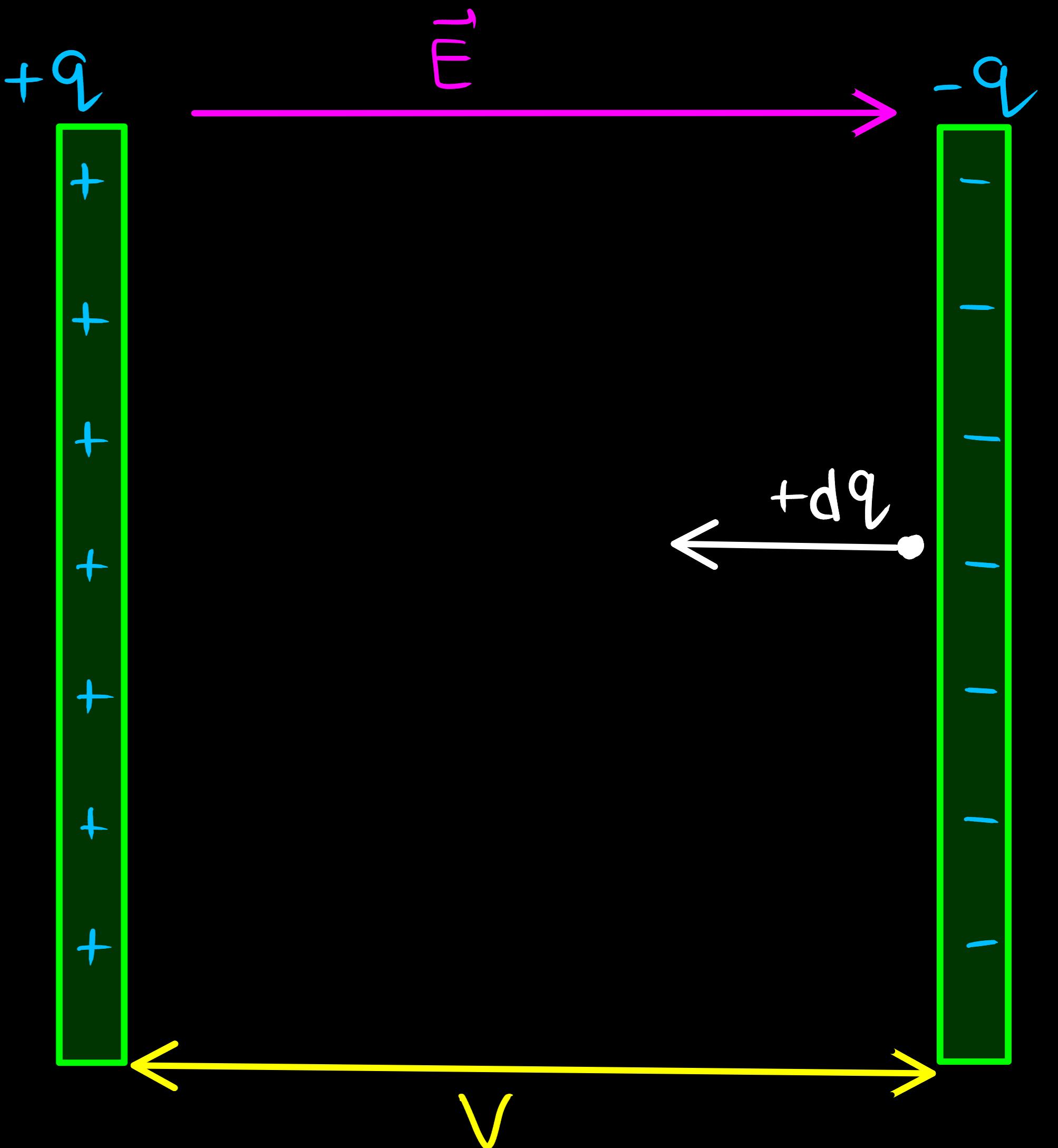
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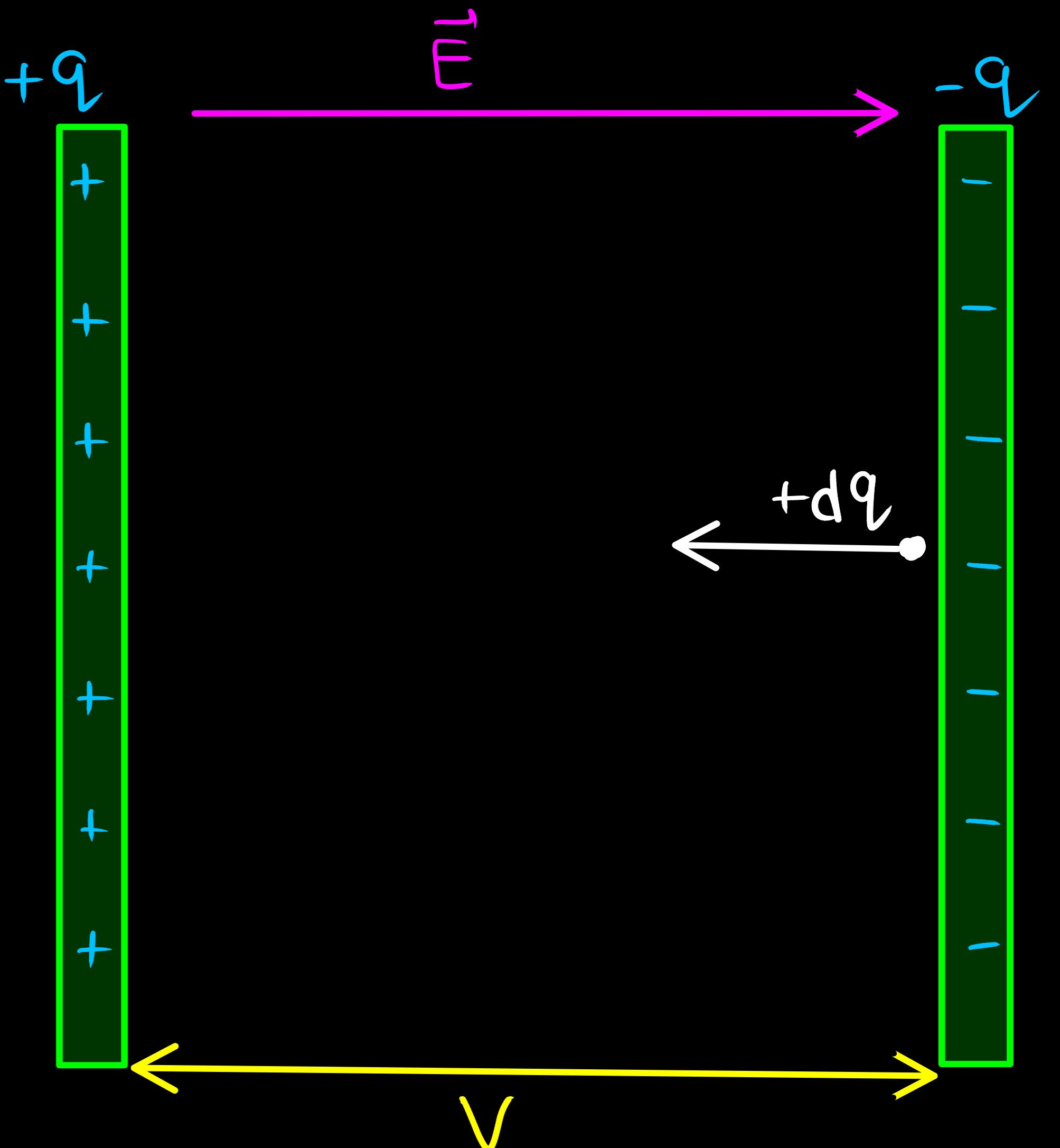
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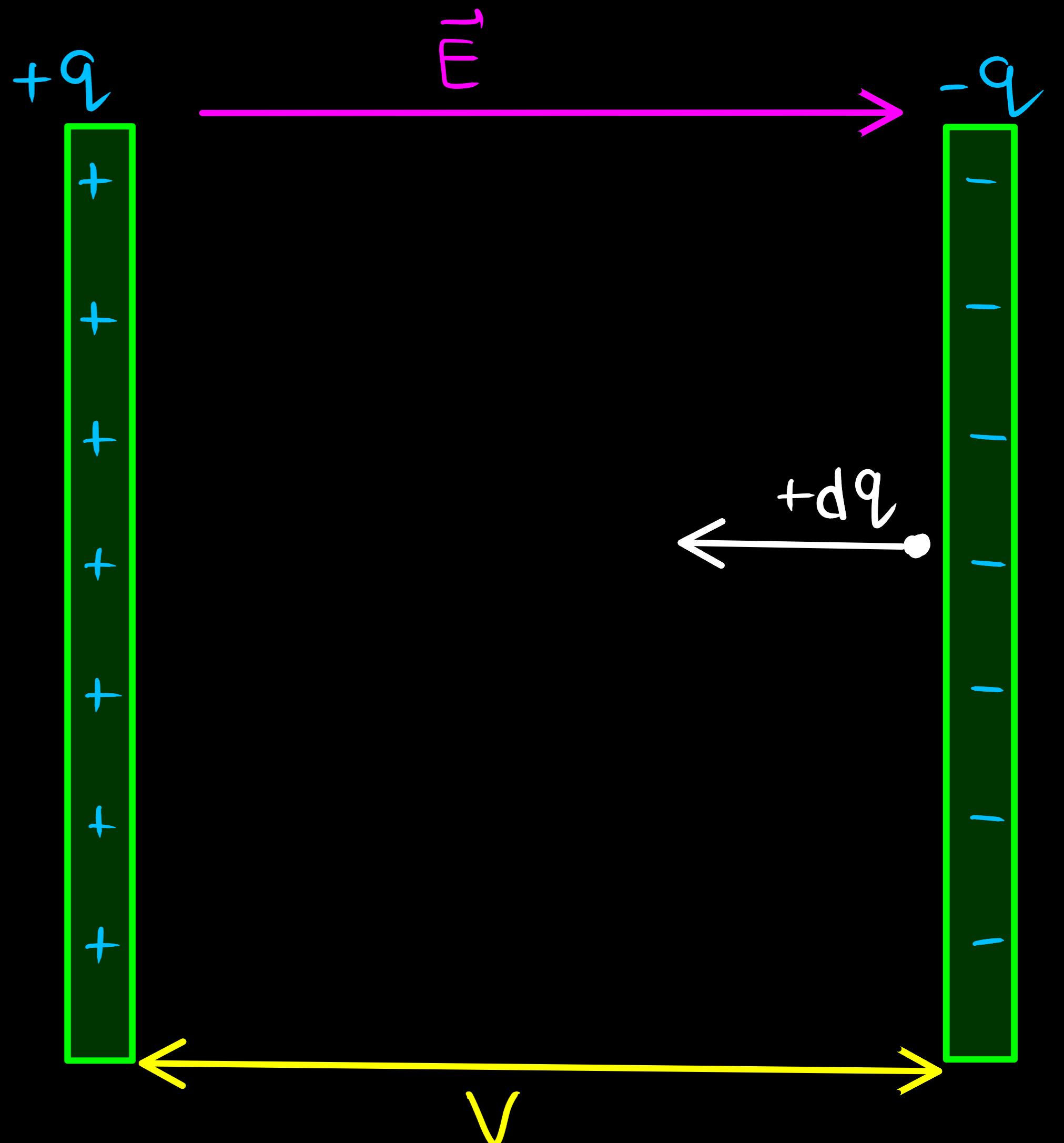
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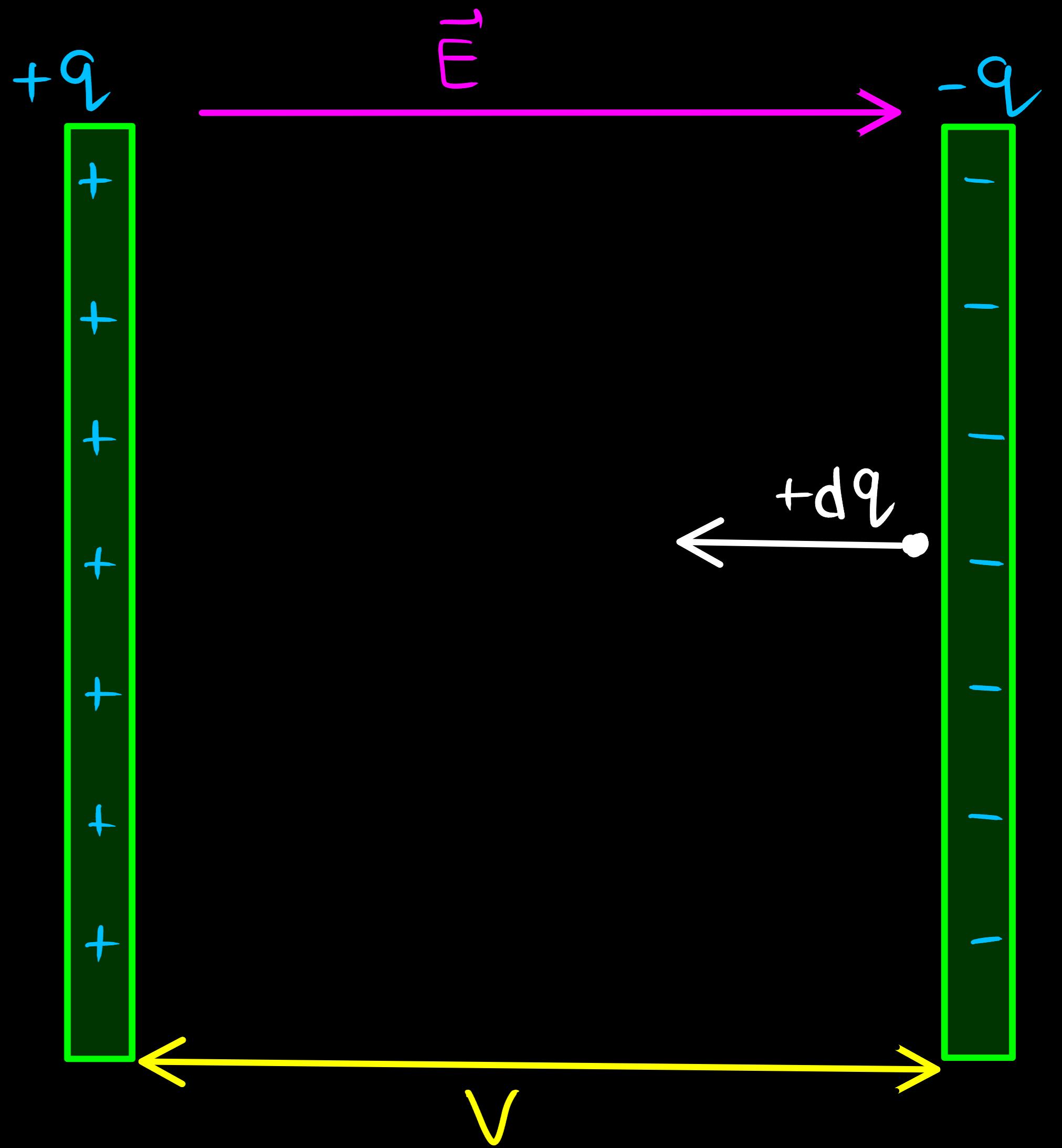
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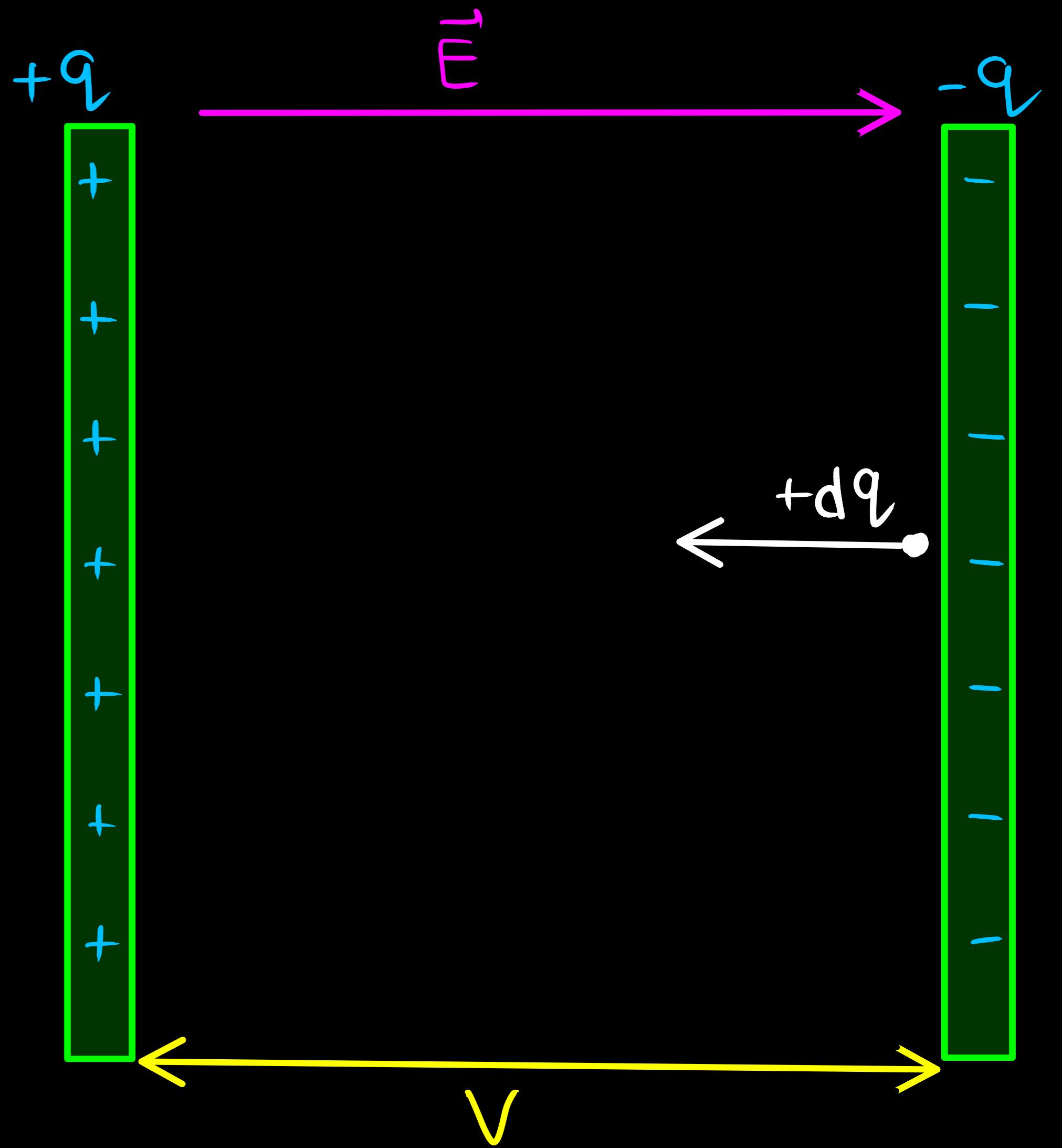
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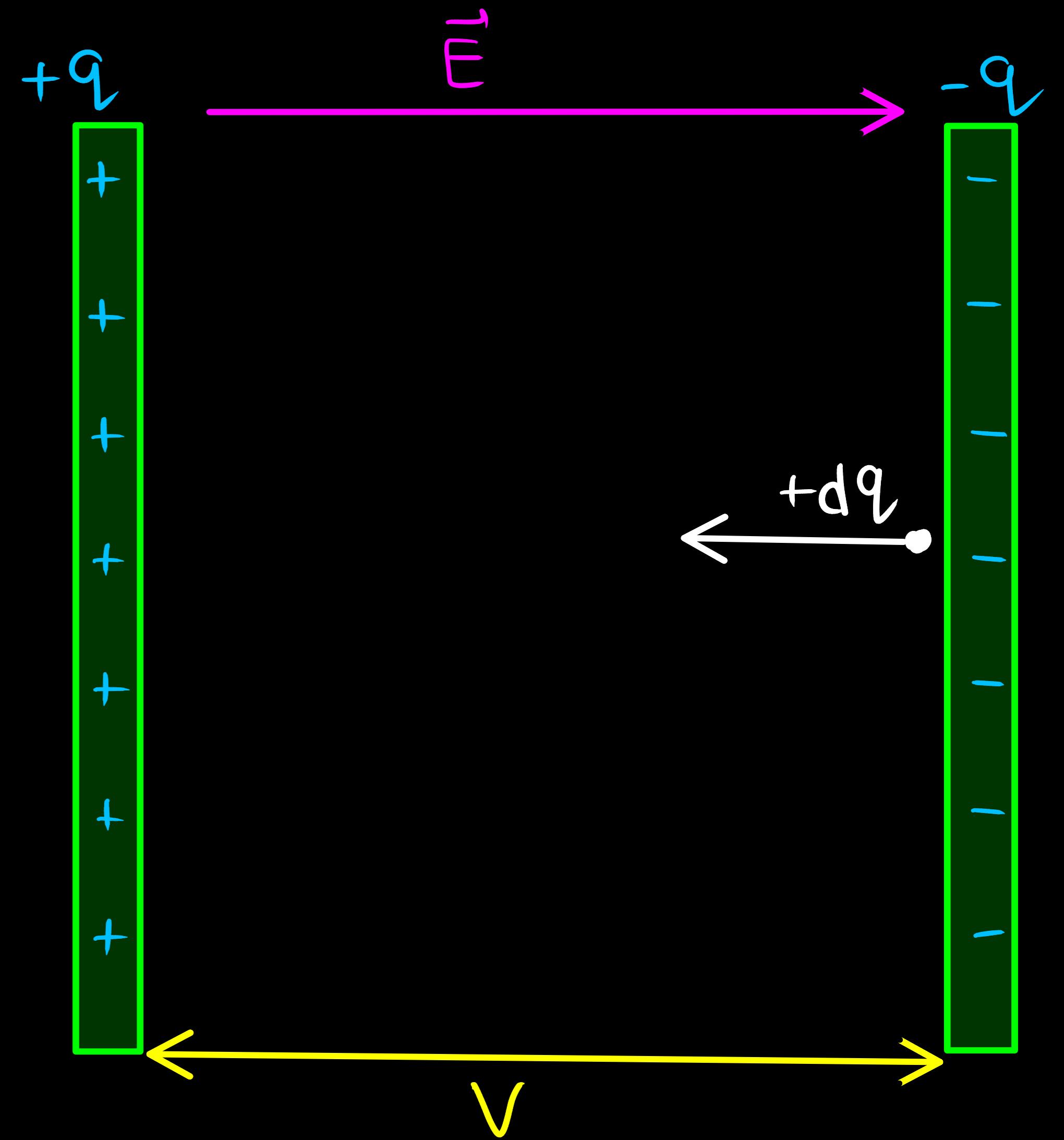
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$$\left(\because E = \frac{V}{d} \right)$$