JEEt Lo 2021

PHYSICS

GRADE - 12

Vedantu JEE

• LIVE

GAUSS'S LAW (ELEC. FLUX)

| SURI SIR |

SURI SIR
IIT BOMBAY

ACCORDING TO PHYSICS...
THE GLASS IS NEVER EMPTY

LIKE SHARE SUBSCRIBE

njoy_suri

Harsh Sir

Theory Class: Monday & Thursday (9pm)
MCQ Class: Wednesday (8pm)

Suri Sir

Theory Class: Wednesday & Saturday (9pm)
MCQ Class: Monday (8pm)

Arvind Sir

Theory Class: Tuesday & Friday (9pm)
MCQ Class: Thursday (8pm)

Daily Schedule JEE 2021

Vedantu JEE 2021 Program

-FEATURES-

- **2500+ hours** of LIVE online teaching
- **45+ Teachers**; from Top IITs and 10+ years experience
- **750 Tests & 3000 Assignments** for Practical Application
- **Instant Doubt Solving** By Academic Mentors
- **Replay/Recording** of Classes If You've Missed
- **Rank Booster Quizzes**
- **Previous Paper** Analysis

Boost your learning with Vedantu Pro

vdnt.in/YTJEE21

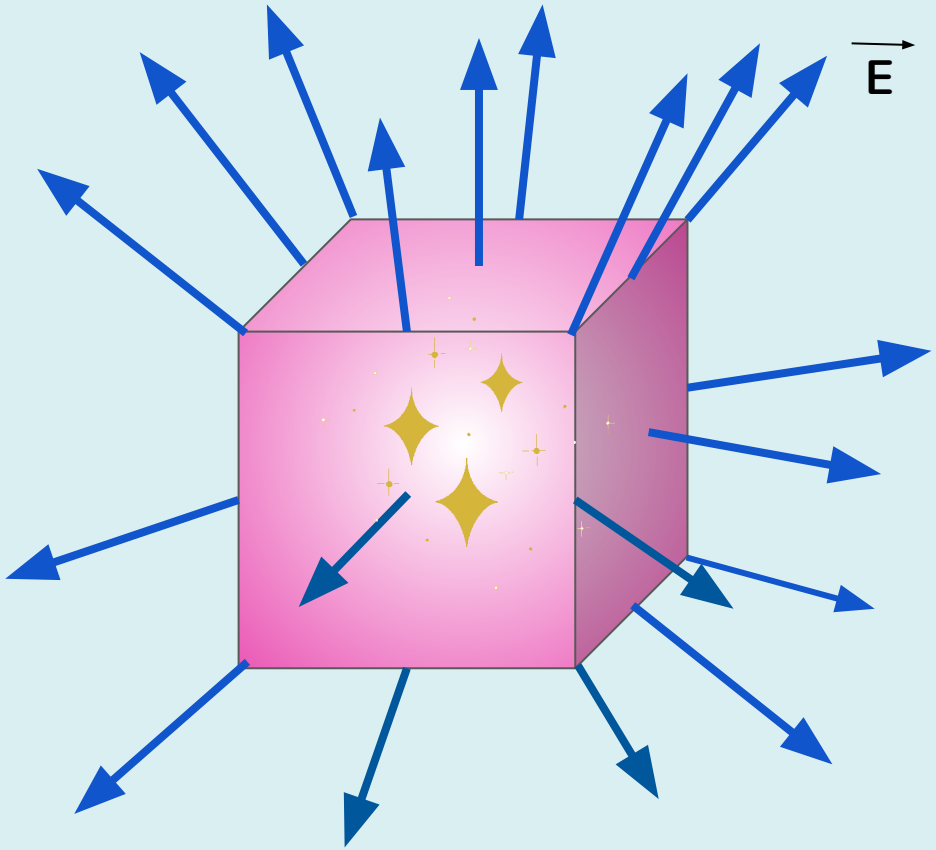
Enroll for FREE

Vedantu
Learn LIVE Online


Vedantu
JEE
SUBSCRIBE

Gauss's Law (Elec. Flux)

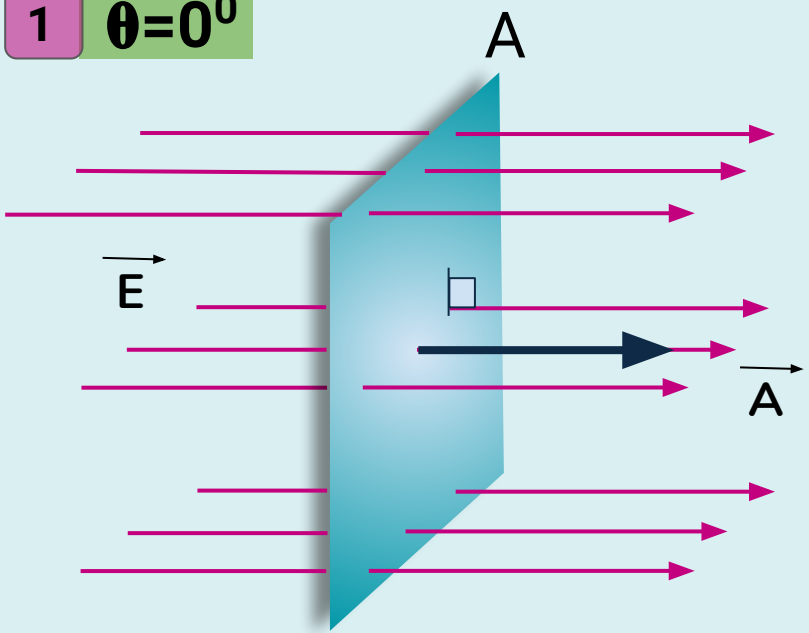
What might be inside the box?!!



Electric flux

It is defined as the total number electric field lines that penetrate a given surface perpendicularly

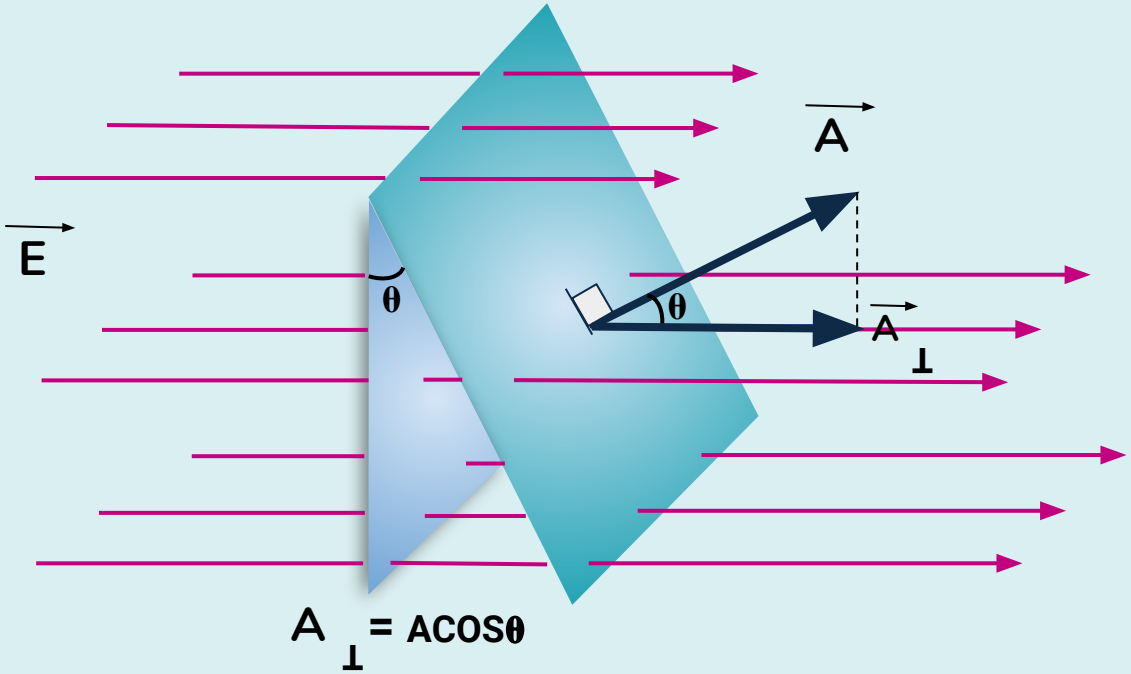
1 $\theta=0^0$



$$\phi = \vec{E} \cdot \vec{A}$$

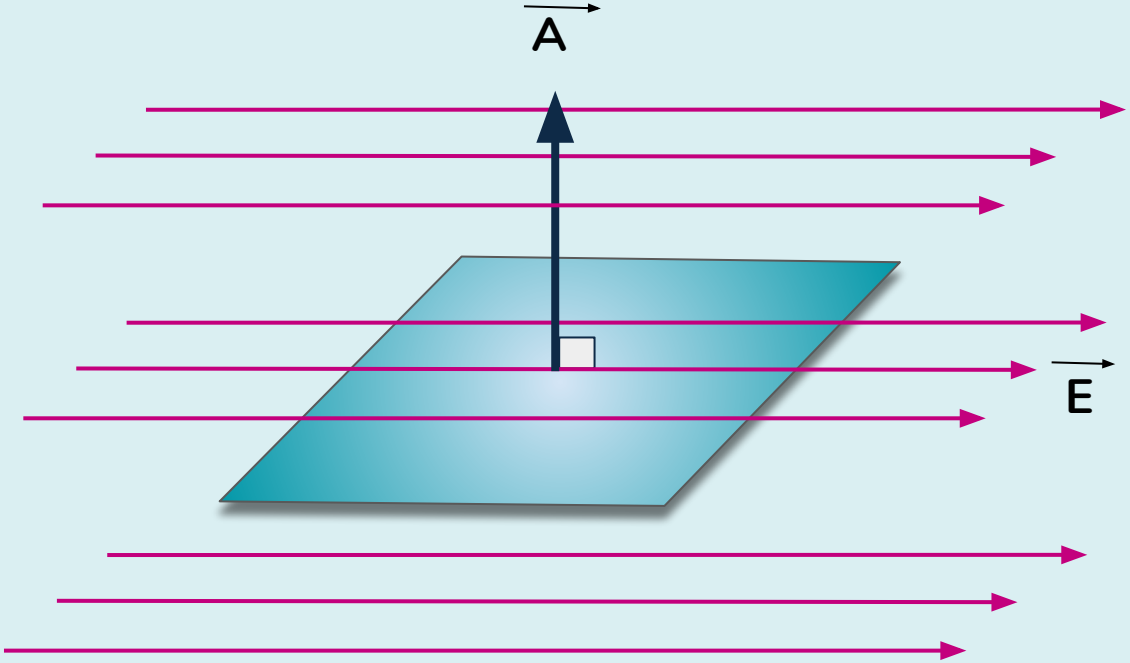
Electric flux

2 **θ= some angle**



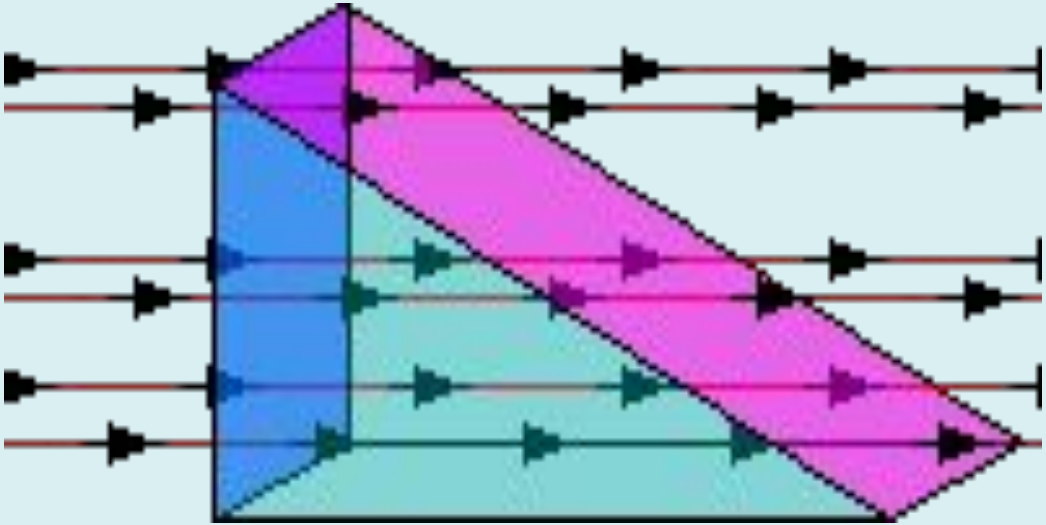
Electric flux

3 $\theta = 90^0$

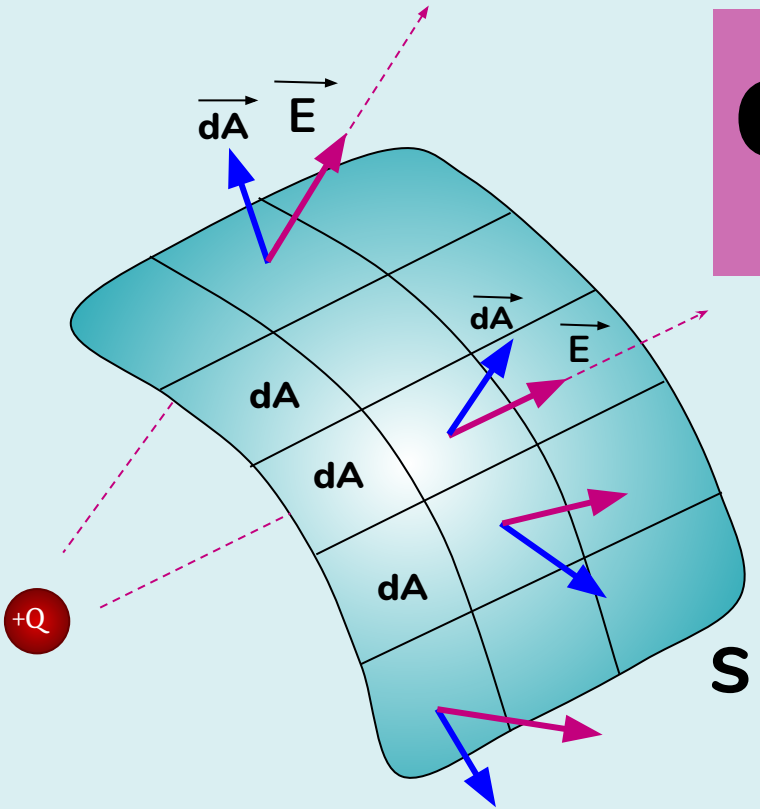


Electric flux

SUPER COOL VISUALIZATION



Non uniform field / irregular surface

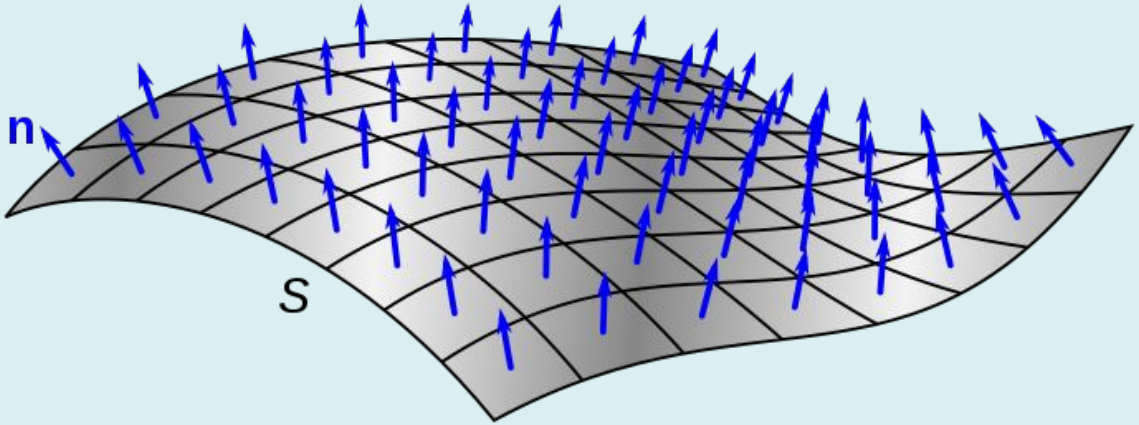


$$\Phi = \int_S \vec{E} \cdot d\vec{A}$$

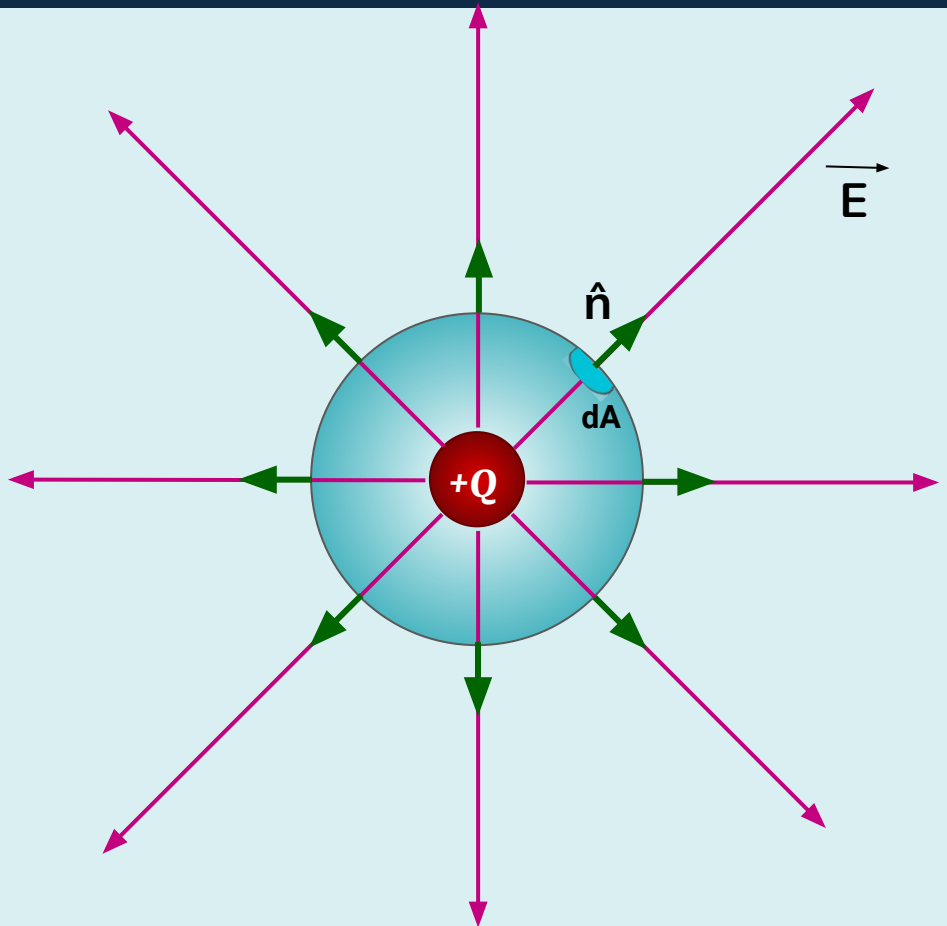
Electric flux

SUPER COOL VISUALIZATION

$$\vec{dA} = dA\hat{n}$$

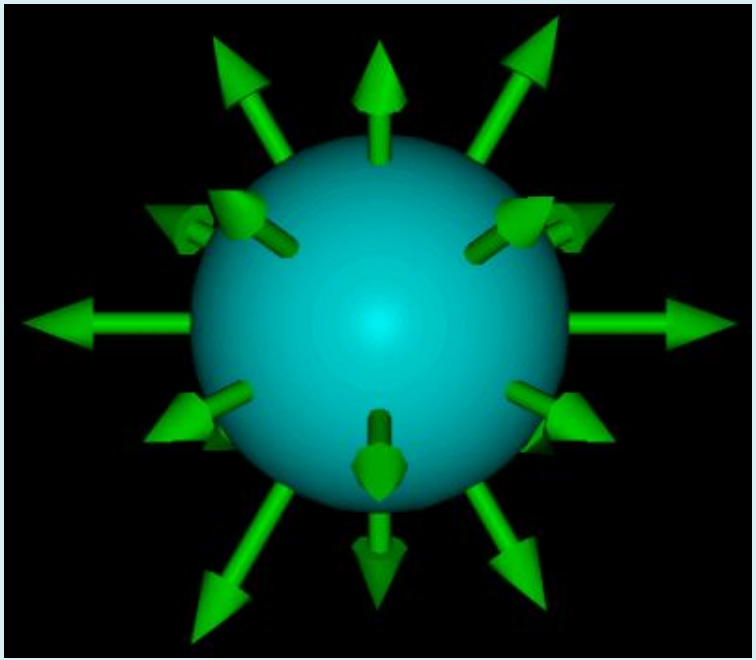


Flux of a point charge

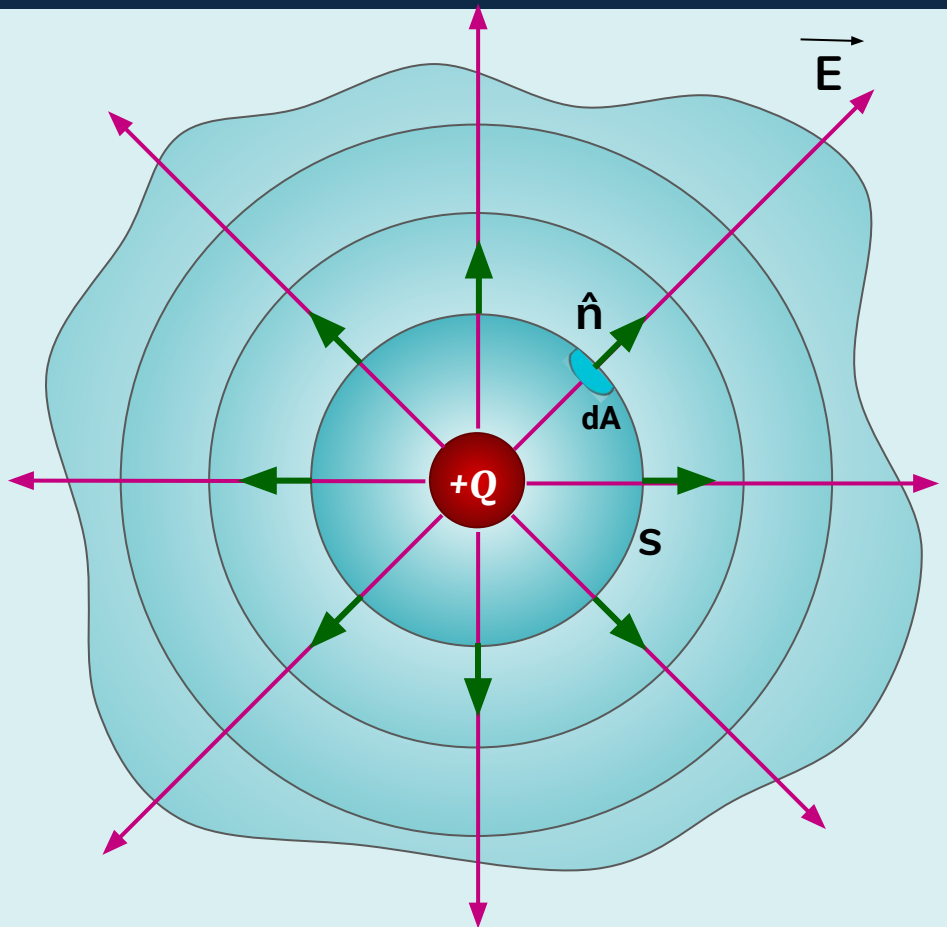


Flux of a point charge

SUPER COOL VISUALIZATION

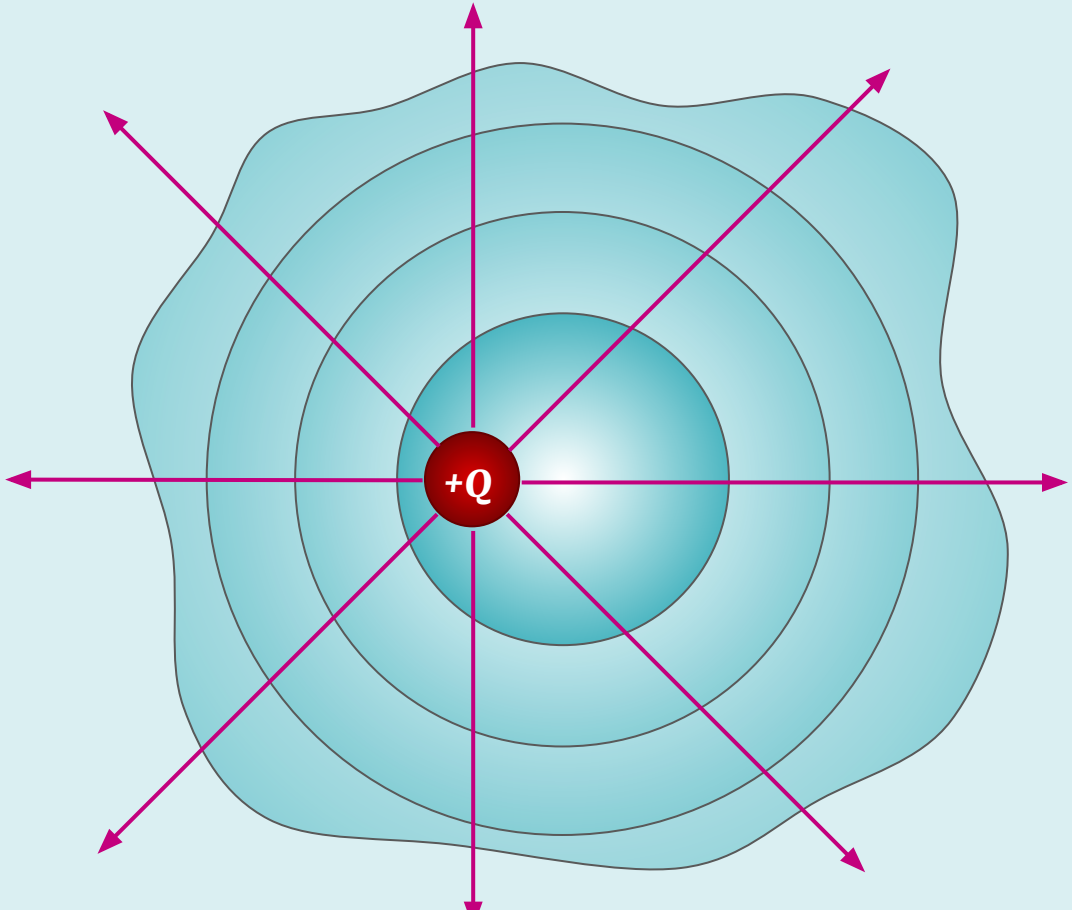


Flux of a point charge

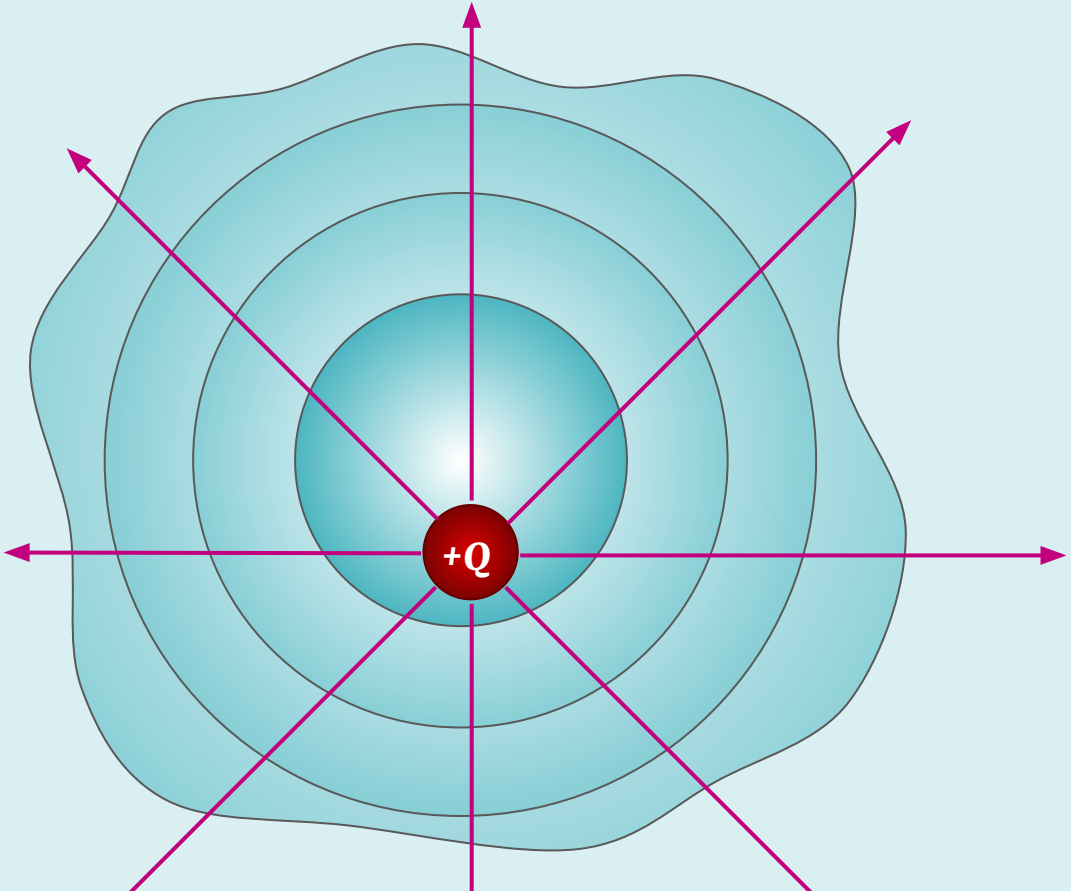


$$\phi = \int_S \vec{E} \cdot d\vec{A}$$

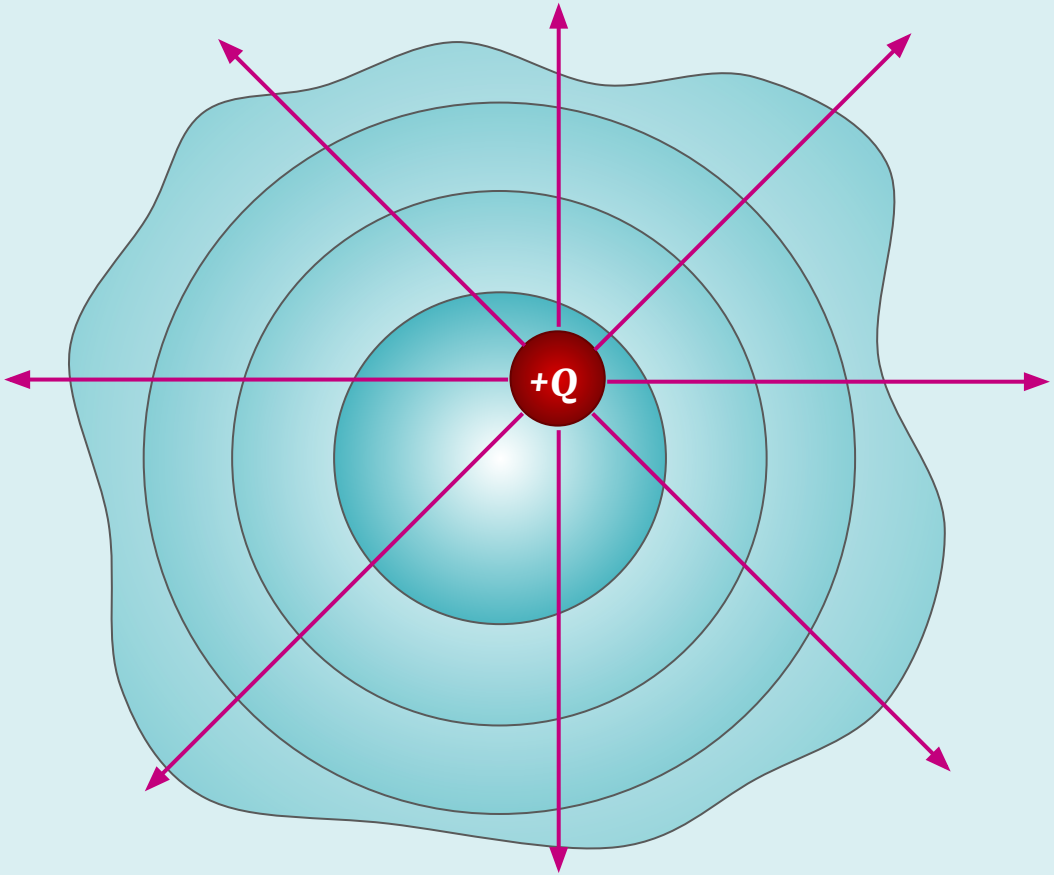
Flux of a point charge



Flux of a point charge



Flux of a point charge



JEE Mains Crash Course

-FEATURES-

- **90 Live** Classes By Best Teachers
  - 3 sessions everyday - Mon to Sat for 6 weeks
- **20+** Comprehensive **Tests**; **Assignments** & Detailed **Analysis**
- **UNLIMITED Doubt Solving** both inside and outside class.
- **Replay/Recording** of Classes If You've Missed
- Important **Tips & Tricks** To Crack JEE
- In class **Rank Booster Quizzes**
- **Previous Paper** Analysis

Batch Started on:
11th MAY 2020

Vedantu
Learn LIVE Online

Vedantu
Learn LIVE Online

JEE

Crash Course

Lightning Deal: ~~₹ 24999~~ ⟶ **₹ 5999**

Use Coupon Code: **SMCC**

Buy Now @ **https://vdnt.in/JEECCE**

How to Avail The Lightning Deal

Vedantu
Learn LIVE Online

Visit the **link** mentioned below

https://vdnt.in/JEECCE

ENROLL NOW

Step-1:
Click on "ENROLL NOW"
Step -2:
Click on "I have a coupon code"
Step-3:

Apply Coupon **SMCC**

Vedantu Online Revolution

KAUN BOLA GHAR SE NAA HOPAYEGA?

AIR 41
CHIRAG JAIN

AIR 38
RAJDEEP SINGH

PwD AIR 1
SUMIT JAIN

JEE ADVANCED 2019 SUCCESS

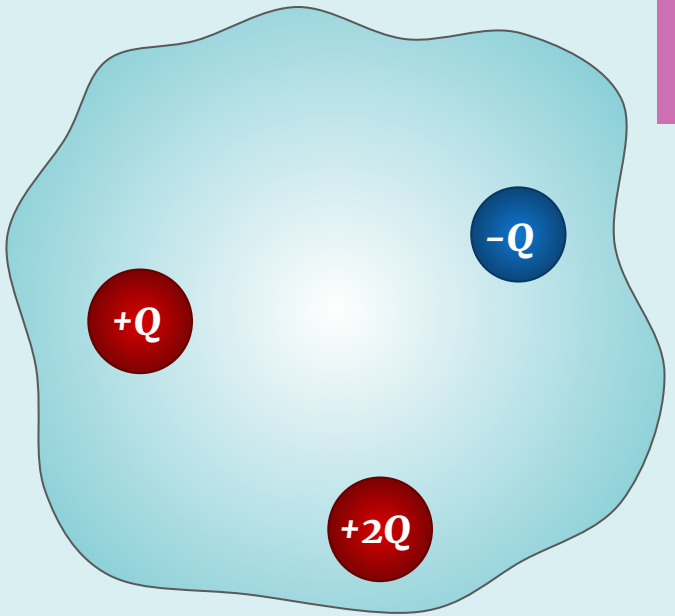
3 in Top 50

ALL CATEGORIES

GAUSS LAW

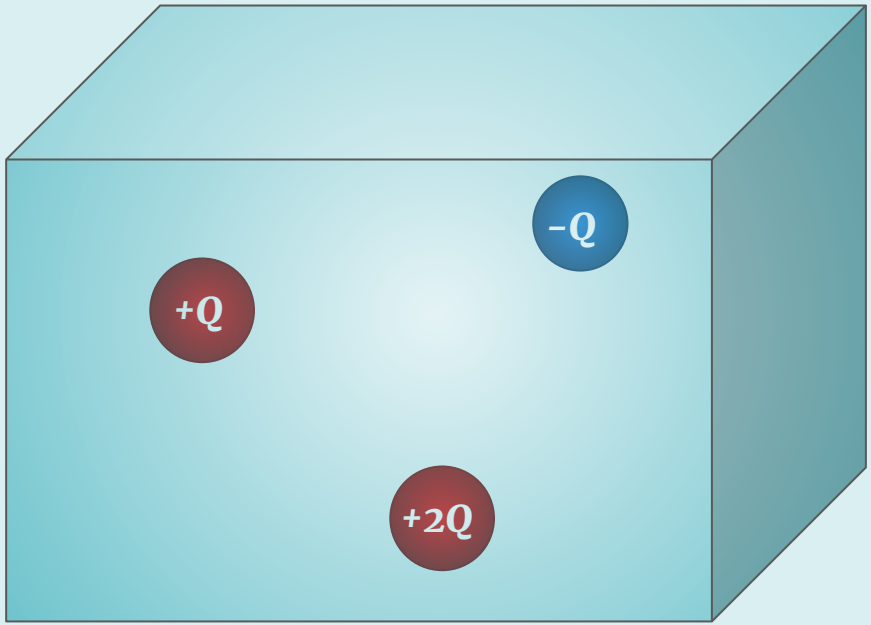
Gauss law states that the flux through any closed surface is equal to the total charge enclosed divided by ε_0

$$\phi = \oint \vec{E} \cdot \vec{dA} = \frac{Q_{net}}{\varepsilon_0}$$



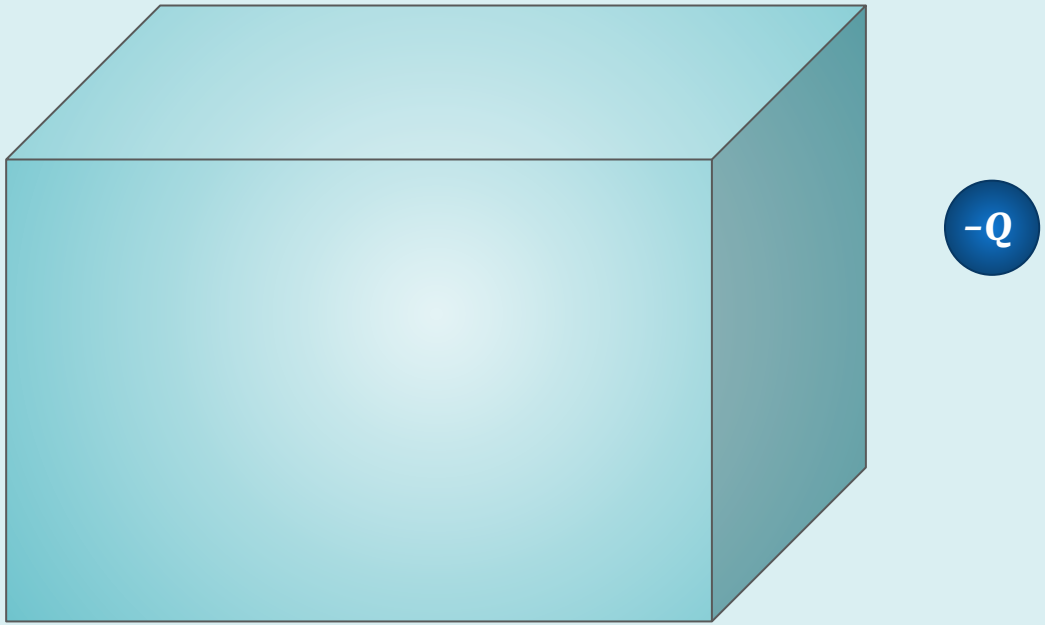
EXAMPLE

Find the flux through the given closed surface.



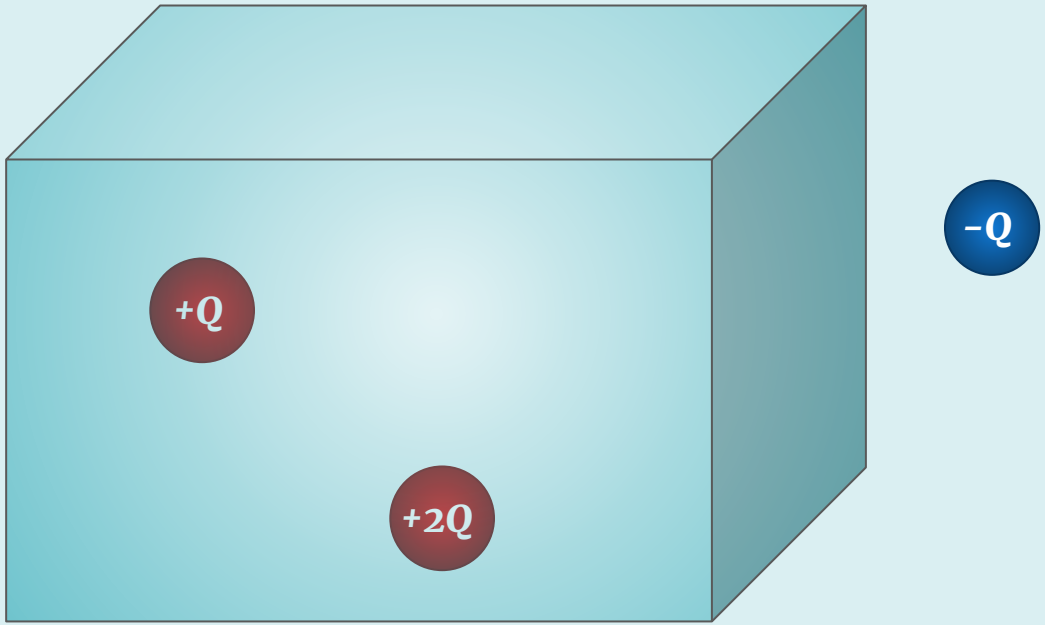
EXAMPLE

Find the flux through the given closed surface.



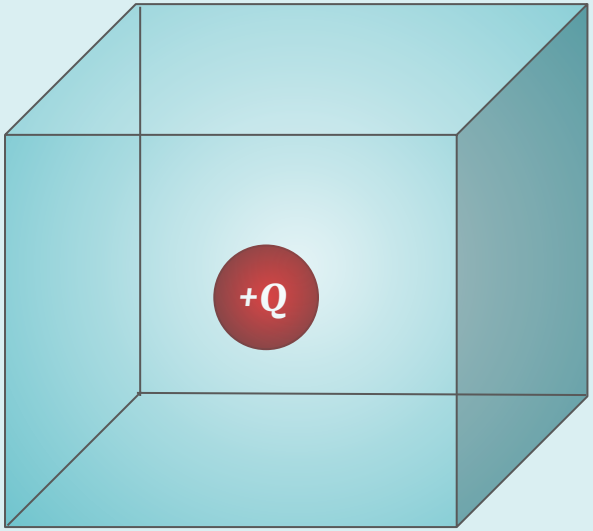
EXAMPLE

Find the flux through the given closed surface.



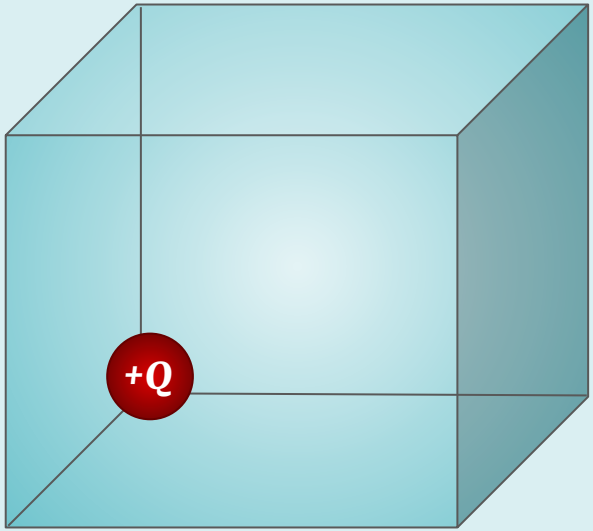
EXAMPLE

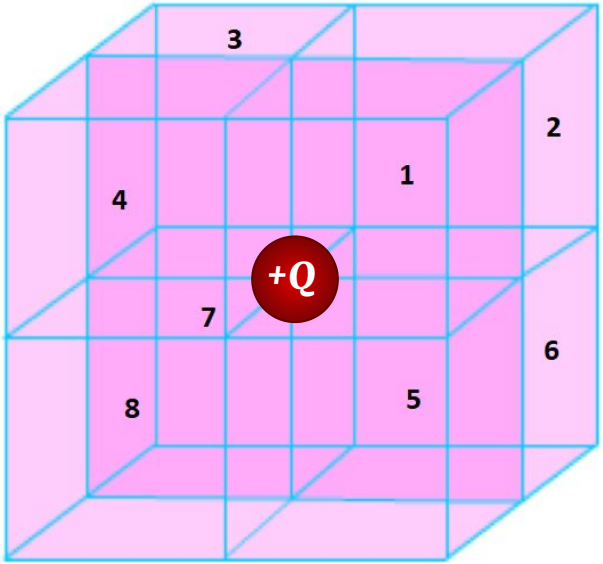
Find the flux through shaded surface of cube if charge +Q is placed at the centre



EXAMPLE

Find the flux through shaded surface of cuboid if charge +Q is placed at one of the corners





JEEt Lo 2021 | JEE Main 2021 (PCM) | JEE Main Preparation | IIT JEE 2021 | Vedantu JEE

24 videos • 4,965 views • Updated today

Public

JEE Main 2021(IIT JEE 2021) - JEE Main Preparation: JEEt Lo 2021 Playlist to learn All Subjects (IIT JEE Maths, IIT JEE Physics and IIT JEE Chemistry) & All Chapters Lectures In 1 Shot for 'JEE Main 2021'.

SORT BY

Relation between Electric Field and Potential IIT JEE | JEEt Lo 2021 for Class 12 | Vedantu JEE

Vedantu JEE

Electrostatics IIT JEE - Electric Field IIT JEE Quiz | JEEt Lo 2021 | JEE Main Physics | Vedantu JEE

Vedantu JEE

Electric Potential & Potential Energy - Electrostatics IIT JEE | JEEt Lo 2021 for Class 12 | Vedantu

Vedantu JEE

Electric Field and Potential IIT JEE Quiz | JEEt Lo 2021 | JEE Main 2021 | JEE Physics | Vedantu JEE

Vedantu JEE • Premieres 5/4/20, 8:00 PM

Electric Field for Rod/Ring/Spheres - Electrostatics IIT JEE | JEEt Lo 2021 for Class 12 | Vedantu

Vedantu JEE

Join Vedantu JEE Telegram channel NOW!

Assignments

Notes

Daily Update

https://vdnt.in/JEEVedantu

Link in Bio


Vedantu
JEE
CRACK JEE
LIKE
SHARE
SUBSCRIBE
#LearningWon'tStop