Intermediate Electricity and Magnetism

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Session-7 23<sup>rd</sup> Jumada-I, 1436

## What will we study today?

Start Magnetostatics!!

## Remarks

Some of you did not send me the interaction of last week: Prove the Uniqueness Theorem under Dirichlet conditions

## Remarks

Your homework-1 is out [check the <u>course website</u>]

## Magnetostatics

- The force due to a magnetic field: similar yet different than that due to an electric field
- Is there a law like Coulomb's law for magnetism? (Biot-Savart Law)
- What are the divergence and curl of B [note: B is not the magnetic field, but related to it.
  B: Magnetic Induction, or Magnetic Flux Density]
- What is the 'potential' relevant to magnetic fields?
- What about the magnetic charge?
- Magnetic dipole moments