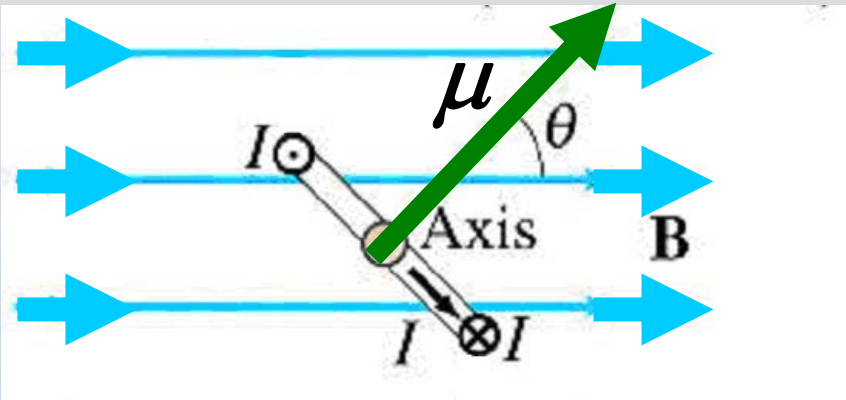
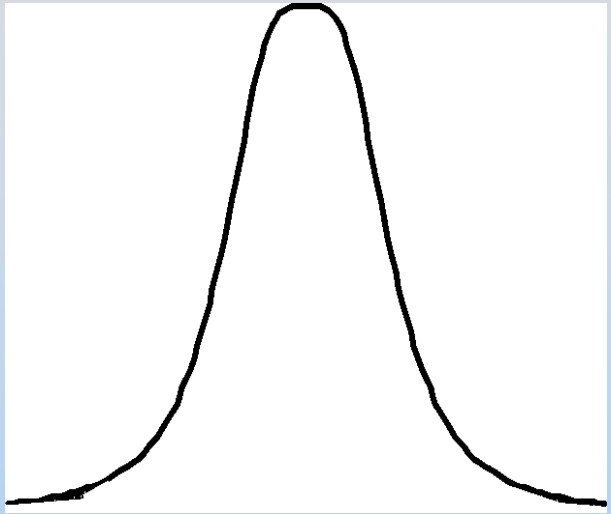
Concept Question: Dipole in Field



From rest, the coil above will:

1. rotate clockwise, not move
2. rotate counterclockwise, not move
3. move to the right, not rotate
4. move to the left, not rotate
5. move in another direction, without rotating
6. both move and rotate
7. neither rotate nor move
8. I don't know

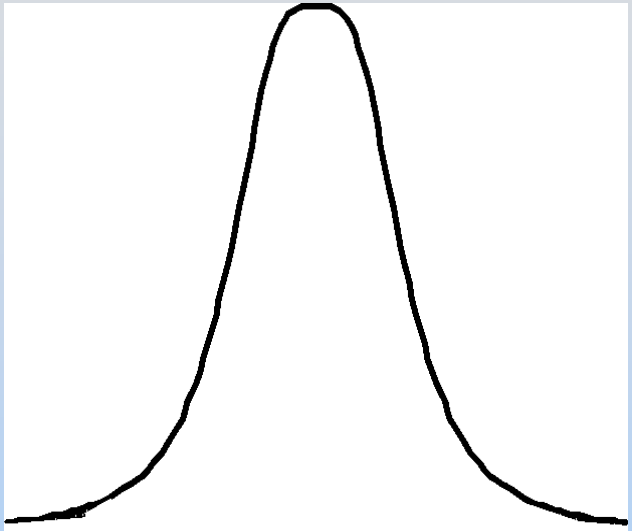
Concept Question: Dipole in Helmholtz



A randomly aligned dipole at the center of a Helmholtz coil will feel:

1. a force but not a torque
2. a torque but not a force
3. both a torque and a force
4. neither force nor torque

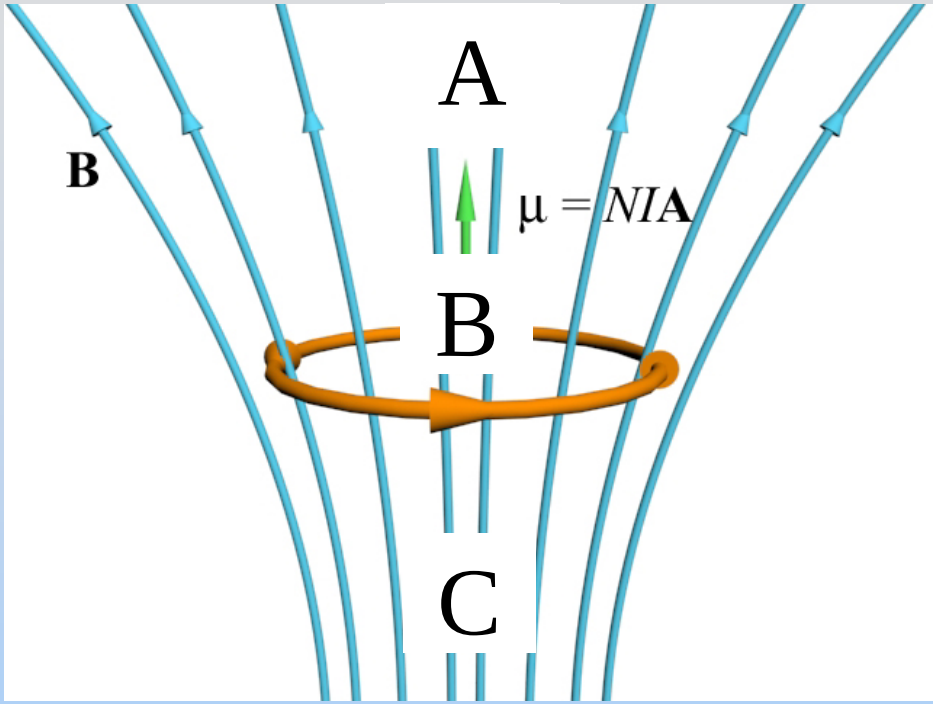
Concept Question: Moving in Helmholtz



When moving through the above field profile, a dipole will:

1. Never rotate
2. Rotate once
3. Rotate twice

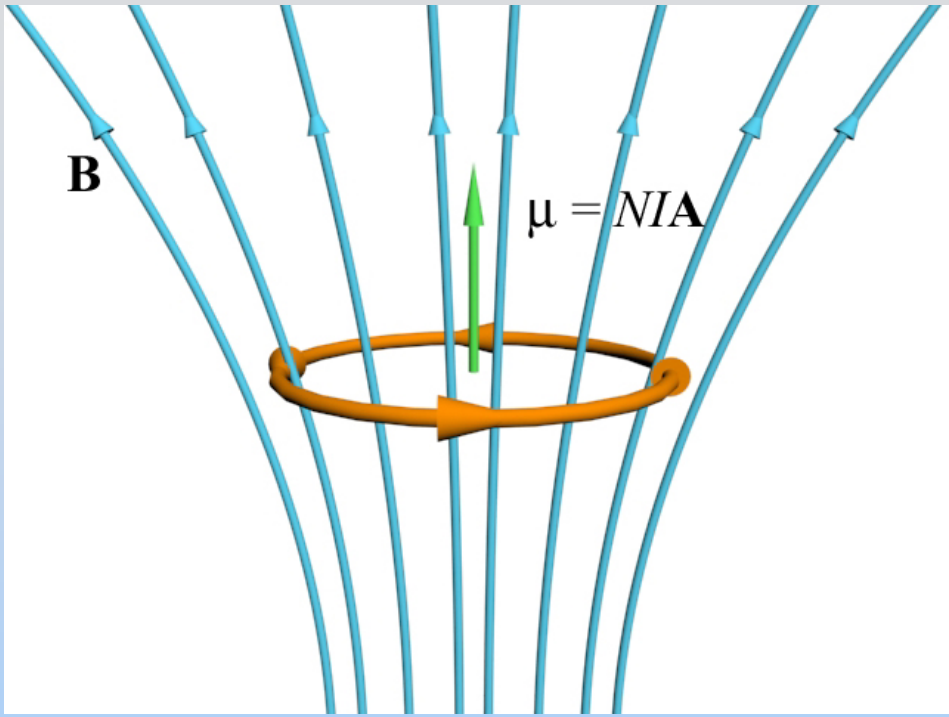
Concept Question: Field Strength



Where is the pictured field the strongest?

1. A
2. B
3. C
4. I don't know

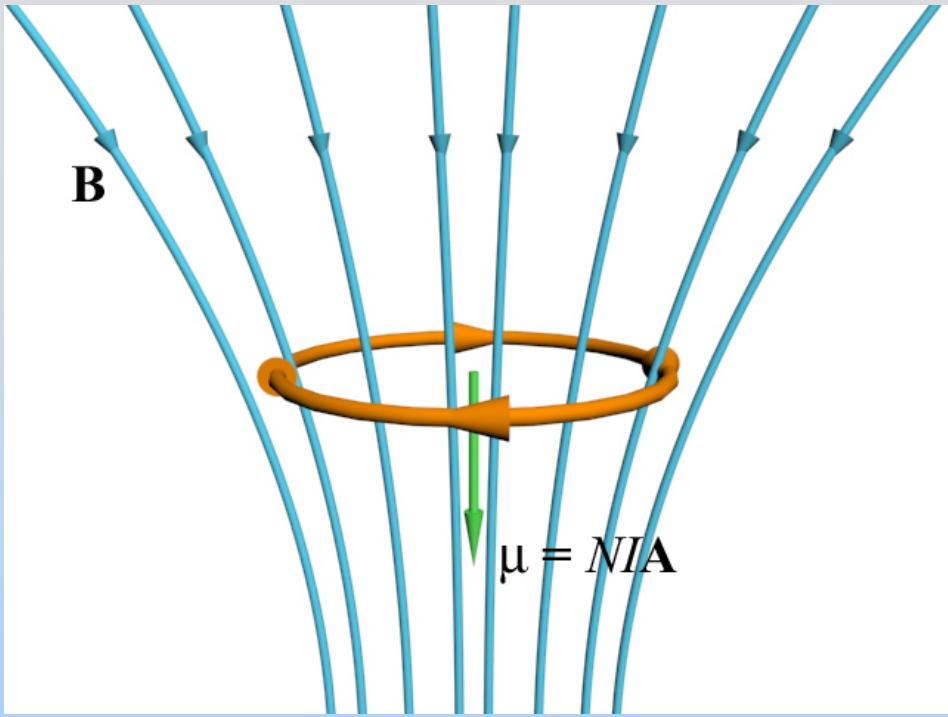
Concept Question: Dipole in Field



The current carrying coil above will feel a net force

1. upwards
2. downwards
3. of zero
4. I don't know

Concept Question: Dipole in Field



The current carrying coil above will feel a net force

1. upwards
2. downwards
3. of zero
4. I don't know

Concept Question: Free Dipoles

If a number of dipoles are randomly scattered through space, after a while they

1. Attract (move together)
2. Repel (move apart)
3. Basically stay put
4. I don’t know

8.02SC Physics II: Electricity and Magnetism

Fall 2010