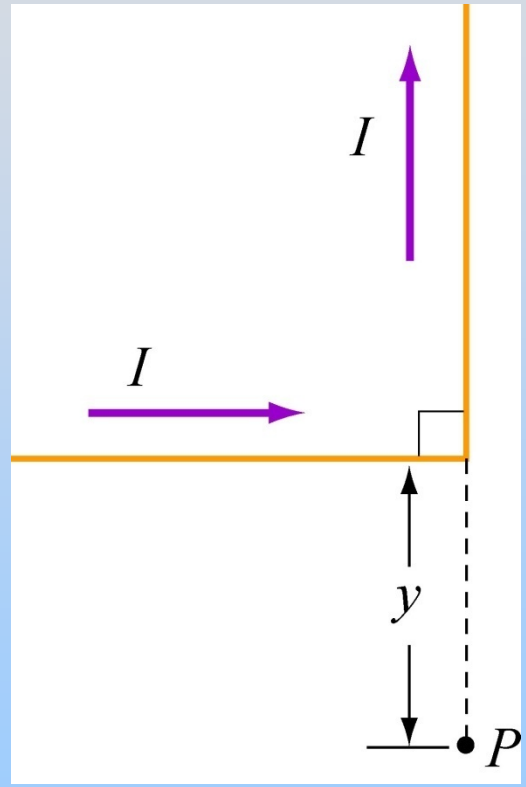
Concept Question: Biot-Savart

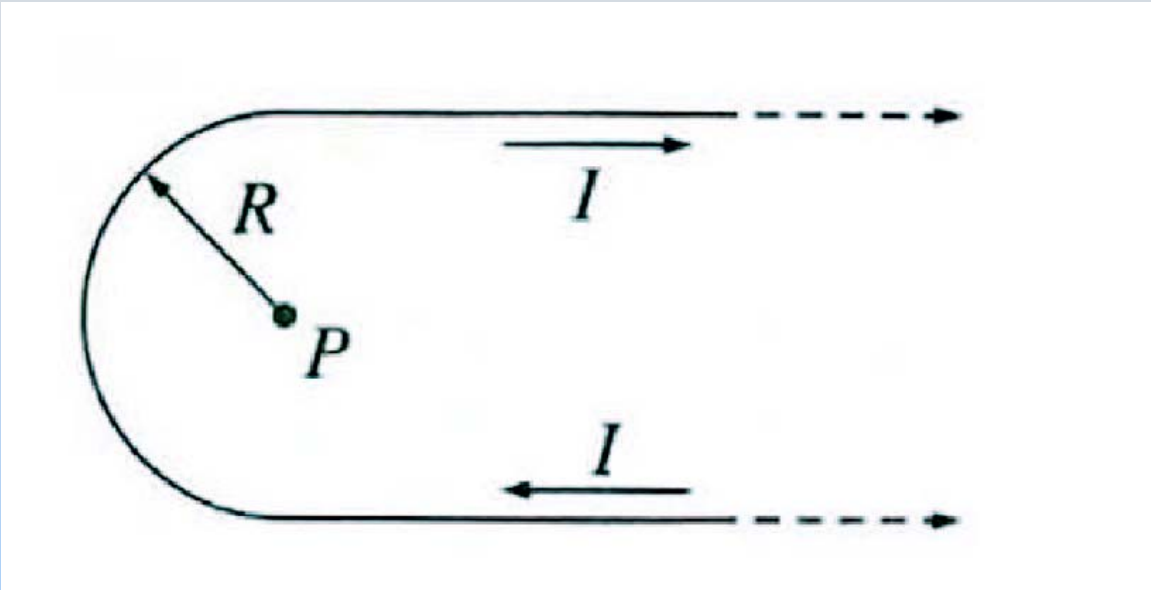
The magnetic field at P points towards the

1. +x direction
2. +y direction
3. +z direction
4. -x direction
5. -y direction
6. -z direction
7. Field is zero (so no direction)



Concept Question: Bent Wire

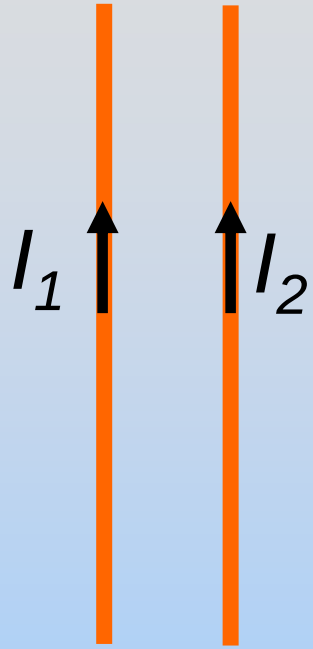
The magnetic field at P is equal to the field of:



1. a semicircle
2. a semicircle plus the field of a long straight wire
3. a semicircle minus the field of a long straight wire
4. none of the above

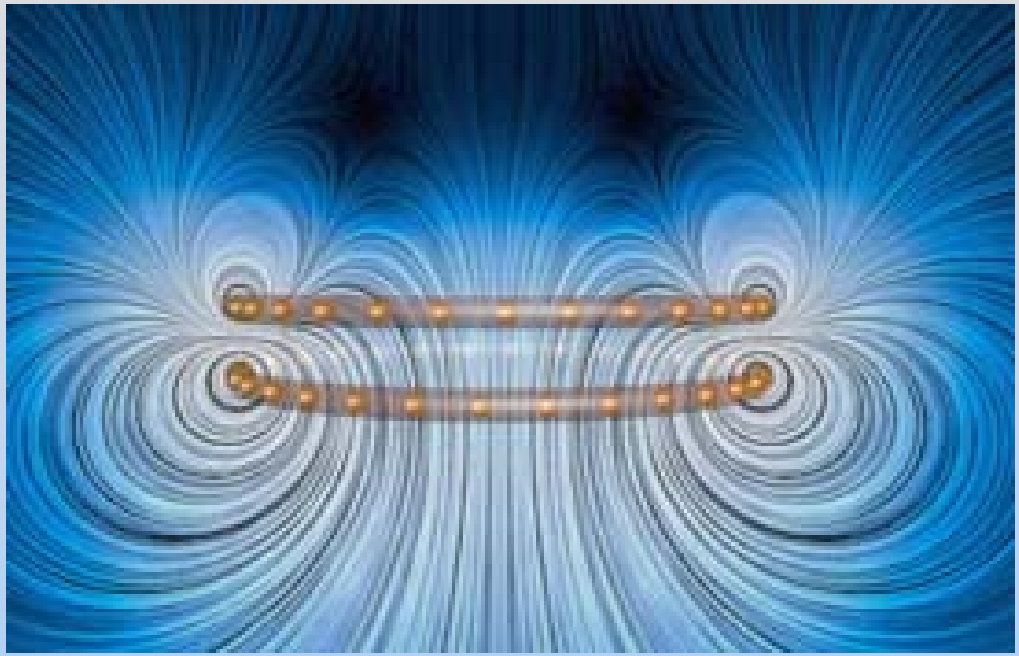
Concept Question: Parallel Wires

Consider two parallel current carrying wires. With the currents running in the same direction, the wires are



1. attracted (likes attract?)
2. repelled (likes repel?)
3. pushed another direction
4. not pushed – no net force
5. I don't know

Concept Question: Current Carrying Coils



The above coils have

1. parallel currents that attract
2. parallel currents that repel
3. opposite currents that attract
4. opposite currents that repel

8.02SC Physics II: Electricity and Magnetism

Fall 2010