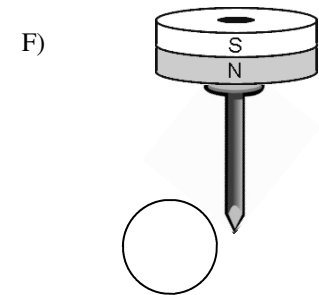
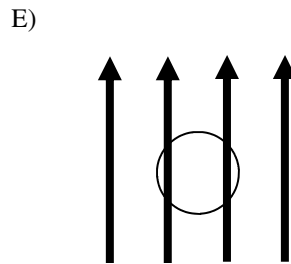
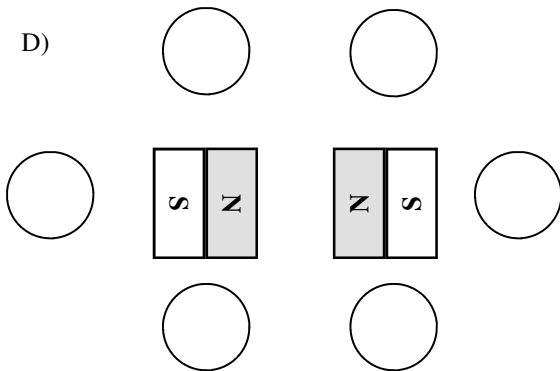
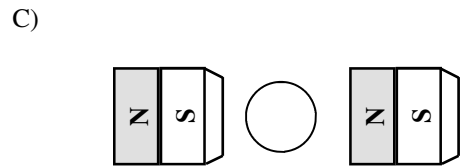
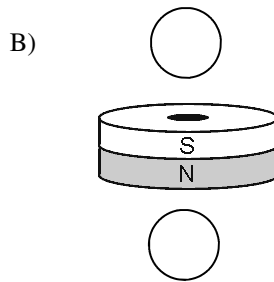
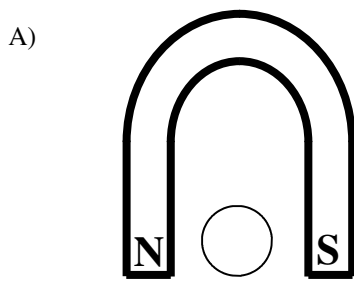


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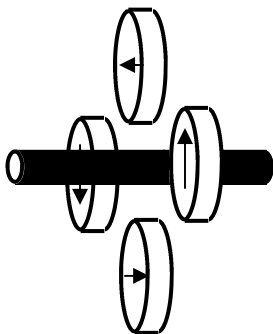
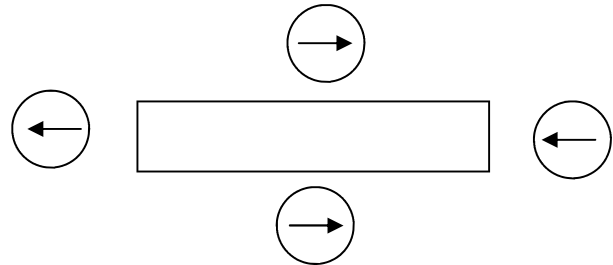
This homework is from the notes. If you didn't get the notes, come early to class.

From the "Magnetic Fields" notes:

1. Draw the symbol for out of the page: For into the page:
2. Which side of a compass is its north pole?
3. A compass needle points toward which pole of a magnet?
4. Using the rules shown on the notes, for the following diagrams, draw the arrow inside the compasses to show which way each compass will point.



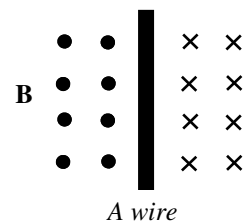
5. Use the compasses to mark the north and south poles of the bar magnet at the right. (Notice that the compasses point to the right on BOTH sides of the magnet.)



6. (From "Magnetism I") What do we call a magnet suspended above another magnet?

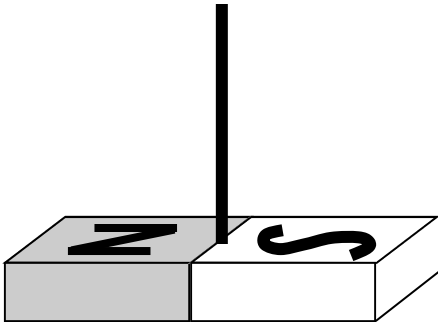
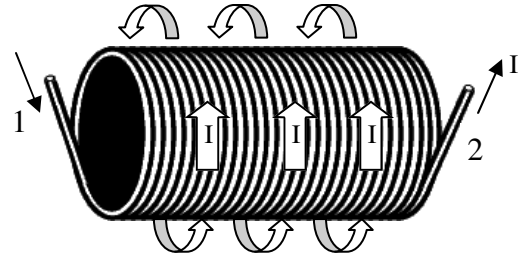
7. In the diagram at the right, use the compasses to decide which direction the current flowing in the wire: to the right or to the left?

8. A. In the diagram at the right, which direction is the magnetic field (B) on the left side of the wire: into or out of the page?
 B. Which direction is the magnetic field (B) on the right side of the wire?
 C. Which direction must the current be flowing in the wire?



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9. A. The group of coiled wires at the right is called a s_____.
- B. Current flowing thru wires causes m_____.
- C. If the current is moving as shown, which side is north?

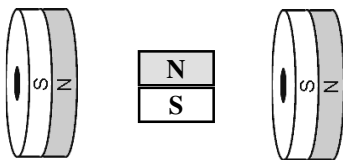


10. A bar magnetic as seen at the right, is suspended by a string so that it is free to turn.
- A. Which part of a compass points toward north?

The hanging magnet will work the same way

- B. Which side of the magnet points toward the earth's north pole?
- C. The magnet stops moving in the position shown, which side of this piece of paper is facing toward the earth's north pole?
- D. Therefore, the earth's geographic north pole is what pole of the earth's internal magnet?

11. The wire below has electric current flowing into the page. Pointing your right thumb into the page, which way is the current flowing: clockwise or counterclockwise?



12. A. Between the two donut magnets which way does the magnetic field (B) point?
- B. Which way will the north pole of the inner magnet turn?