## Drawing a Solenoid

Is the front surface of this cube the lower left square or the upper right one? You can see it both ways.


Is this half of a solenoid curving into the paper so you see its concave insides, or curving out of the paper, so that you see its convex outsides?
You can see it both ways. The full cylinders for the two cases are shown on the sides.


For class we'll want to think about the B-field inside a solenoid, so it is important to be able to draw a half-solenoid to illustrate that.
Here is a way to clarify this: draw a thin bar down the center of the solenoid.


In this picture, hopefuly you can see it as the current passing around and behind the central bar, and thus see why I am getting this direction for the B field inside the solenoid.

