Question #20

Two rubber o-rings are tightly fitted onto a section of thin-walled aluminum tube, as shown in the photograph below. This device rests on a long strip of thin plastic, as seen in the photograph.

The plastic strip is held horizontal, along the surface of the table, and rapidly pulled out from under the cylinder. Because there is a lot of friction between the o-rings and the plastic sheet, pulling the sheet out from under the cylinder causes the cylinder to spin rapidly in the clockwise direction and to move from right to left in the picture above.

After the plastic sheet has been pulled out from under the cylinder, and the cylinder comes into contact with the table top, which of the following will happen?

• (a) The cylinder will roll to the left.
• (b) The cylinder will roll to the right.
• (c) The cylinder will stop and remain near where it was when it left the plastic.

Click here for Answer #20 after July 10.