## Answer #320

The answer is (a), as seen by actually taking the funny little character apart and looking in there!



Note that if I push the funny little character over on his side I must lift up the end that was originally at the bottom (very slightly) to get him to stand upside-down, as seen in the video.

You would think that a cylindrical cavity (a) would yield stable equilibrium if you simply lie it on its side, which does not happen, although it might stand on either end if the cavity were closer to the end than to the sides. Cavity (c) would only allow it to lie on its side. Cavities (d) or (e) would only allow it to rest with *one* of the ends up, but not both.



It would seem logically that answer must be (b). However, it appears from inspection of the interior that the equilibrium is very tenuous, and it is actually very difficult (unstable equilibrium?) to get the ball to remain in the center of the opening, and not go to either end, so the little character is held (virtually) horizontally.

Question of the Week

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