Answer #215

The answer is (b): The meter stick will fall off the left side, as can be seen by clicking on the photograph below to see an mpeg video of the action. The meter stick has first been balanced on the supports, then the supports are started into rotation after the mpeg has begun.

Note that this system is basically unstable. If the weight of the meter stick were exactly symmetrically balanced on the two supports, as seen in the photograph below, it would remain at rest. However, if the meter stick moves ever so slightly to one side, that side will support more of the weight, have more friction with its roller, and the meter stick will proceed to move off that side.

Here is what happens if the meter stick is slightly unbalanced to the left.

Here is what happens if the meter stick is slightly unbalanced to the right.

Question #216 is a follow-up to this question.
For questions and comments regarding the *Question of the Week* contact
**Dr. Richard E. Berg** by e-mail or using phone number or regular mail address
given on the [Lecture-Demonstration Home Page](#).