## **Question #38**

Two physical pendula, shown in the photograph at the left below, have the same length but one has a large weight at the end, as shown in the detail photo at the right below.



The two pendula will be raised so that they are oriented in a horizontal position and released simultaneously from rest. What will happen? Will the straight pendulum get to the equilibrium position (vertical orientation, as in the photograph at the left above) first, will the pendulum with the weight get to the vertical orientation first, or will the two pendula reach the vertical orientation at the same time? Which pendulum will win the race?

When the pendula are lifted by 90 degrees and released simultaneously

- (a) the straight rod will reach the bottom first.
- (b) the rod with the weight on the end will get to the bottom first.
- (c) the race will end in a tie.

Click here for <u>Answer #38</u> after November 13, 2000.

Question of the Week

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For questions and comments regarding the *Question of the Week* contact <u>Dr. Richard E. Berg</u> by e-mail or using phone number or regular mail address given on the <u>Lecture-Demonstration Home Page</u>.