## Answer #104

The answer is (c): the pendulum bob will move directly downward after it is released exactly when the bob is at its maximum position, as seen in an mpeg video by clicking your mouse on the photograph below. The video is played at half speed to show the details more carefully.

-60	60
-50	
-40	
-30	
-20	20
-10	-10-
-0	0-

At the exact time when the bob reaches its end position it will be motionless. Therefore, when it is under the influence of the force of gravity *solely*, it will accelerate directly *downward* with the acceleration of gravity, identical to a heavy ball released from rest.

## Archive 6

Question of the Week

Outreach Index Page

Lecture-Demonstration Home Page



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>.