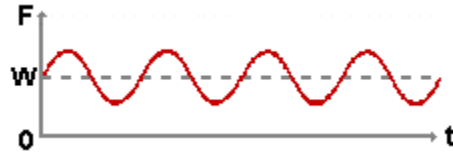


Answer #200

The answer is (d): the force will oscillate around the value of the static weight of the bob, as in the figure below. In fact, the actual force is slightly asymmetric, ranging from somewhat greater than the static value when the suspension is nearly vertical, to somewhat less than the static value when the bob is near the two extreme angles, as seen in an mpeg video by clicking your mouse on the photograph.



Note that the scale reading becomes less than the weight of the bob when the velocity of the bob becomes small and instantaneously reaches zero at the end points of the motion, but it never reaches zero: the radial component of the weight of the bob must still be balanced by the spring scale.

[Archive 10](#)

[Question of the Week](#)

[Outreach Index Page](#)

[Lecture-Demonstration Home Page](#)



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](#).