Question #26

A spring scale hangs from the top of a frame as shown in the figure at the left below. Attached to the bottom of the spring scale is a pulley; one end of the rope across the pulley is attached to the bottom of the frame, and the other end is free. Pulling on the free end of the rope creates a force on the spring scale.



When the frame is hung from a second identical spring scale, as shown in the figure at the right above, we see that the weight of the frame with its spring scale, pulley, and rope is about 5 Newtons.

With the frame hanging from the upper spring scale, the free end of the rope over the pulley in the frame is pulled until the lower spring scale reads 10 Newtons. When the lower spring scale reads 10 Newtons, what will the upper spring scale read?

- (a) The upper scale will read 5 Newtons.
- (b) The upper scale will read 10 Newtons.
- (c) The upper scale will read 15 Newtons.

Click here for <u>Answer #26</u> after August 21.

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>.