Answer #64

The answer is (d): 2 meters, as can be seen on an mpeg video by clicking on the photograph below.

Because the terminal velocity is proportional to the square root of the mass, the stack of four filters will fall with twice the velocity. If they are released simultaneously, the stack of four filters will then fall two meters while the single filter is falling one meter, assuming that the terminal velocity is reached virtually instantaneously when the filters are released.

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](#).