## Answer #331

The answer is (b), as can be seen in a short mpeg video by clicking your mouse on the photograph below. Note that inserting the inverting prism into the system moves the object toward the prism, so the lens must be moved slightly away from the prism to re-focus the object cross, as seen in the video.



Because the light from the object is reflected internally off the top inside surface of the prism, the image is inverted top-to-bottom, but not in the direction in-to-out in the photograph. This is similar to a reflection in a plane mirror, discussed in Q#18, Q#19, Q#97, Q#168, and Q#279: when you view yourself in a plane mirror, the image is inverted in the front-back direction, but not in the top-bottom or left-right directions.

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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>.