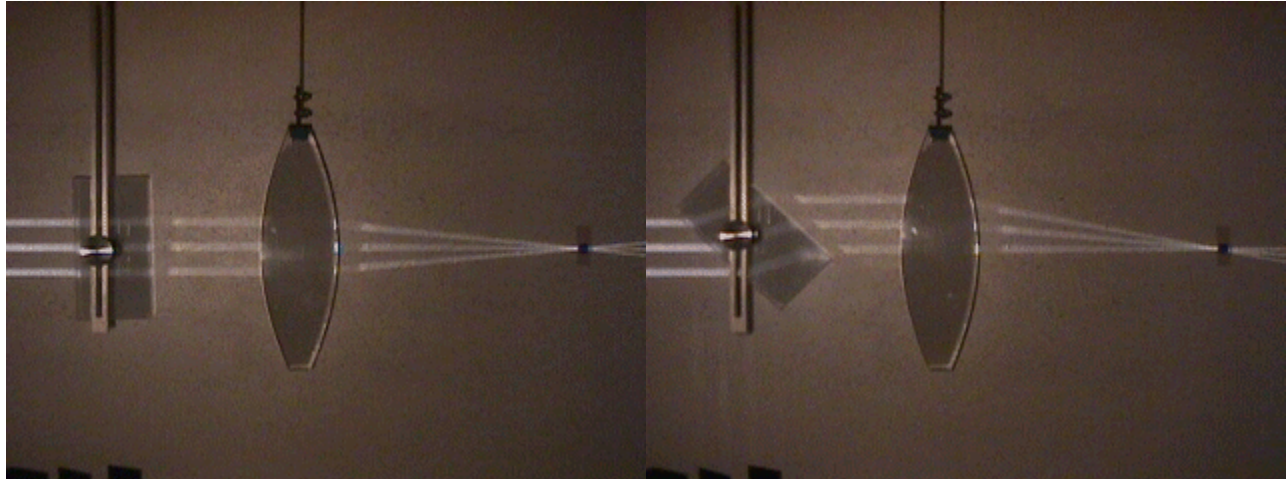


## Answer #4

The answer is (c); the focus will remain at the same point. This is shown in the pictures below, comparing the case with displacement of the rays and the original focus where the block is straight.



In fact, the focal point for *all* parallel rays entering the lens is the same - the definition of a focal point.

One thing that makes this problem complicated is that if the *vertical position* of an object is changed the vertical position of the image IS changed. Although it appears that this is the case, moving the parallel rays upward is not equivalent to changing the vertical position of the object.

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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](#).