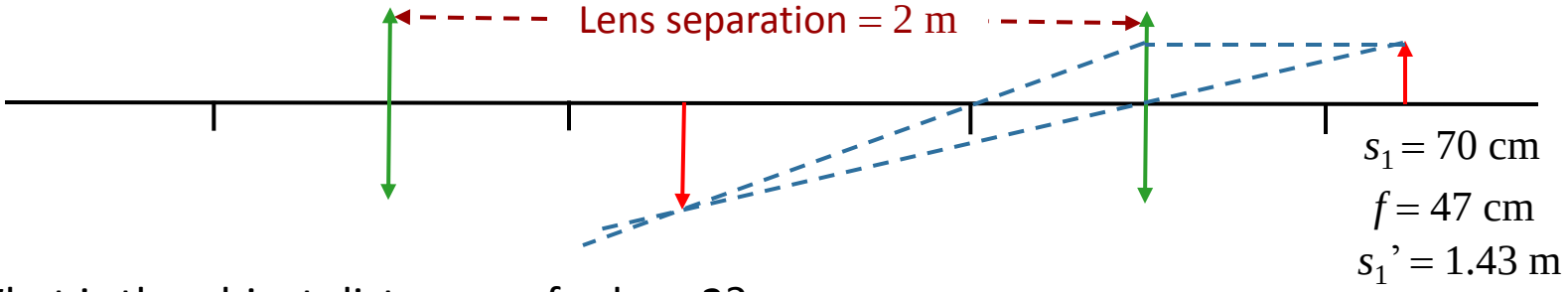
Multiple Lenses Exercises

Two converging lenses are set up as shown. The focal length of each lens is 47 cm. The object is a light bulb located 70 cm in front of the first lens.



What is the object distance s_2 for lens 2?

A) $s_2 = -1.43$ m B) $s_2 = +1.43$ m C) $s_2 = -0.57$ m **D) $s_2 = +0.57$ m** E) $s_2 = +2.7$ m

THE OBJECT FOR THE SECOND LENS IS THE IMAGE OF THE FIRST LENS

~~$s_2 = -0.57$~~

OR

$s_2 = +0.57$

Image of first lens is a REAL object for the second lens