

## Physics 2135

## Special Homework Assignment #11

A diverging lens with a focal length of 14 cm magnitude is placed 12 cm to the right of a converging lens with a focal length of 18 cm. Both lenses have the same optic axis. An object is placed 33 cm to the left of the converging lens.

(a) Find the position of the image produced by the lenses in combination.

(b) Is the image real or virtual?

(c) What is the magnification?

(d) What is the orientation (upright or inverted) of the image produced by the lens combination relative to the object?