



SUBJECT

NAME

DATE

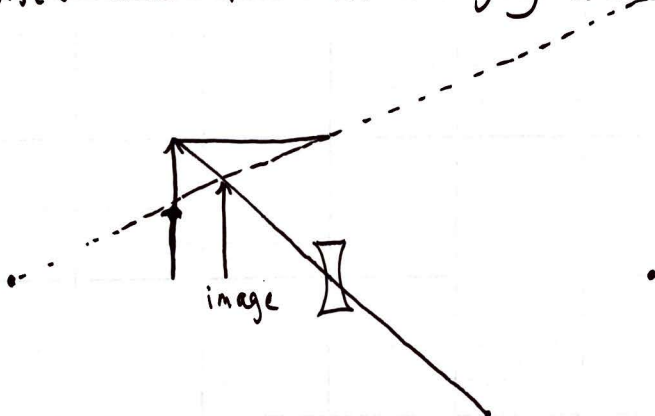
REVISION DATE

Reading 3/3

- ① (a) s is the object distance. It is positive when the object is to the left of the lens (for a single lens, this is always the convention so $s > 0$).
- (b) s' is the image distance. $s' > 0$ if the image is to the right of the lens and $s' < 0$ if it is to the left.
- (c) f is the focal length. $f > 0$ for converging lenses and $f < 0$ for diverging lenses

②

(a)



(b) Virtual, upright, reduced

light rays

↑ not ↓

smaller than
object arrow

don't originate/meet
@ image

Extra!

Find m

$$\frac{1}{s} + \frac{1}{s'} = \frac{1}{f} \Rightarrow \frac{1}{5\text{cm}} + \frac{1}{s'} = -\frac{1}{10\text{cm}} \Rightarrow s' = -\frac{10}{3}\text{cm}$$

$$m = -\frac{s'}{s} = -\frac{-\frac{10}{3}\text{cm}}{5\text{cm}} = +\frac{2}{3}$$