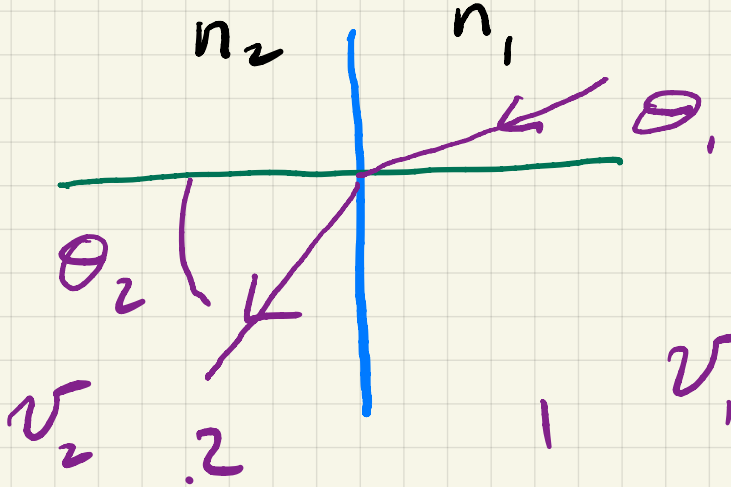
213 lecture 8 fall 2021

213 Lecture 8 9/10/21

→ Quiz 2
→ HW 1 due today
→ Lab ?
→ Lectures

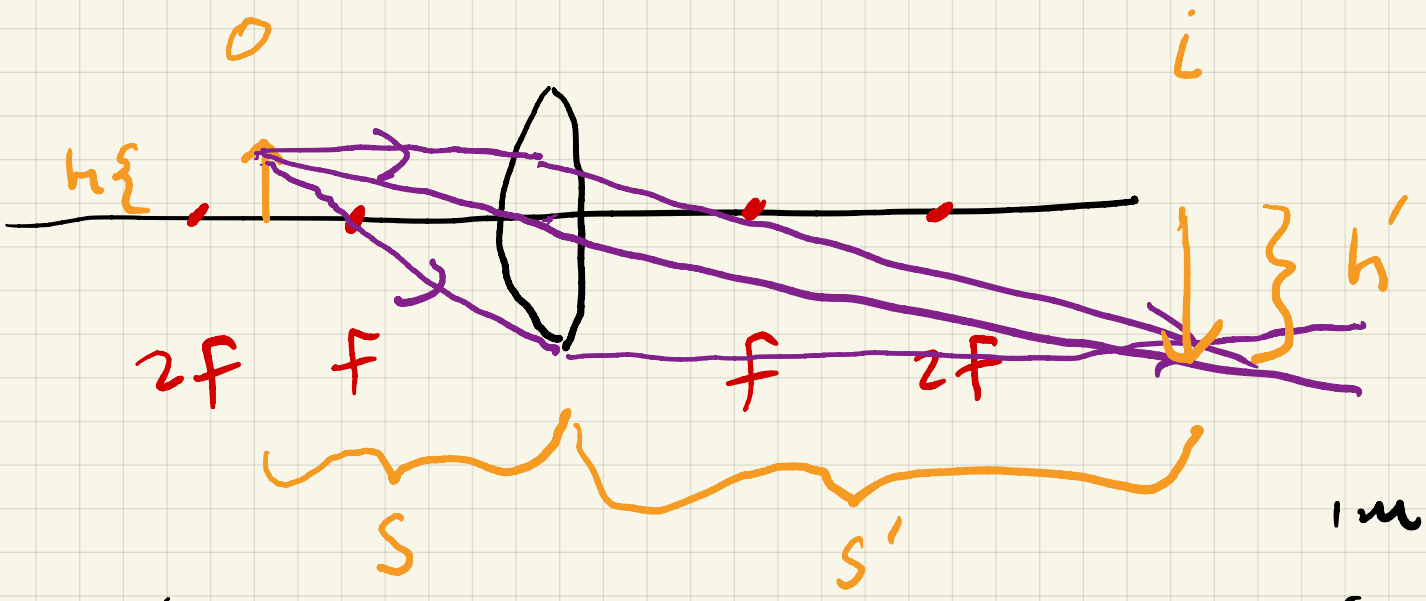
Today: who knows ⇒ refraction
ray tracing for thin lenses

$n = \frac{c}{v}$



$v_2 > v_1$
$\Rightarrow n_2 < n_1$

Ray tracing for thin converging lenses



$$|M| = \frac{h'}{h} = \frac{-s'}{s}$$

image is: real magnified ($|M| > 1$) & inverted

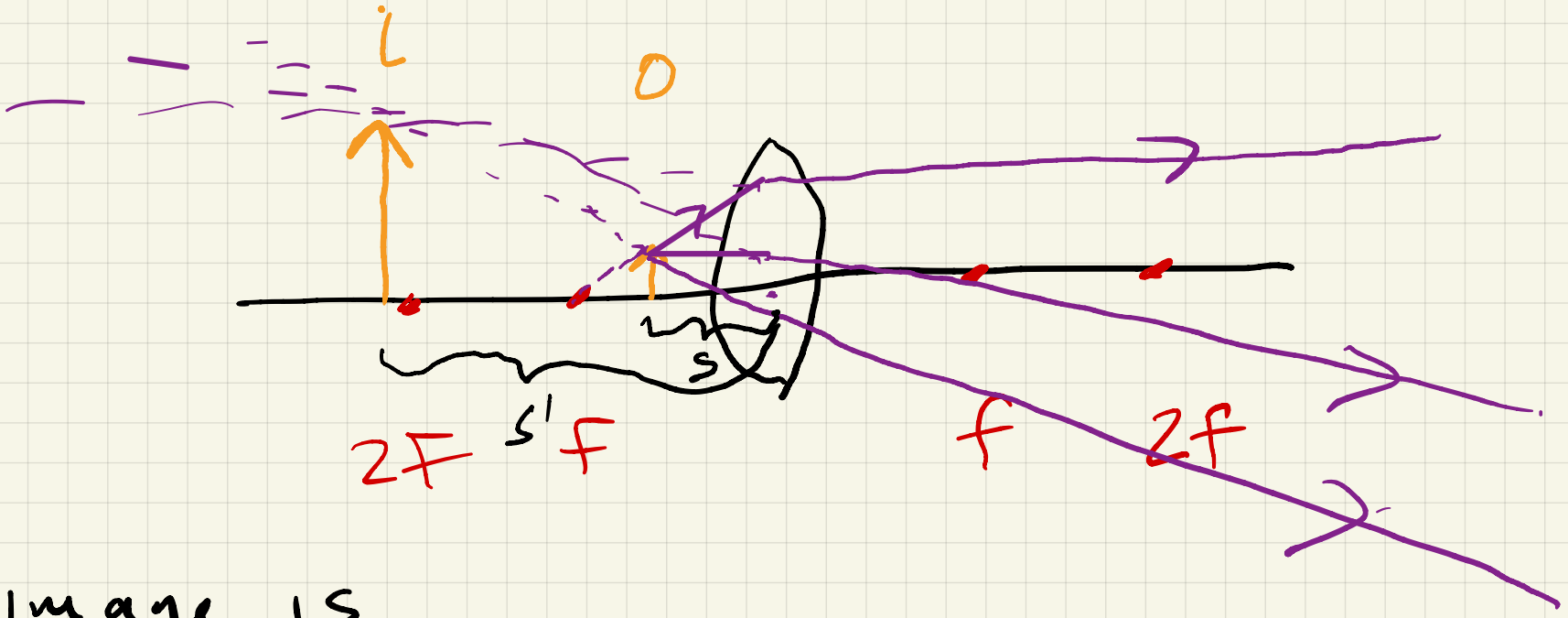
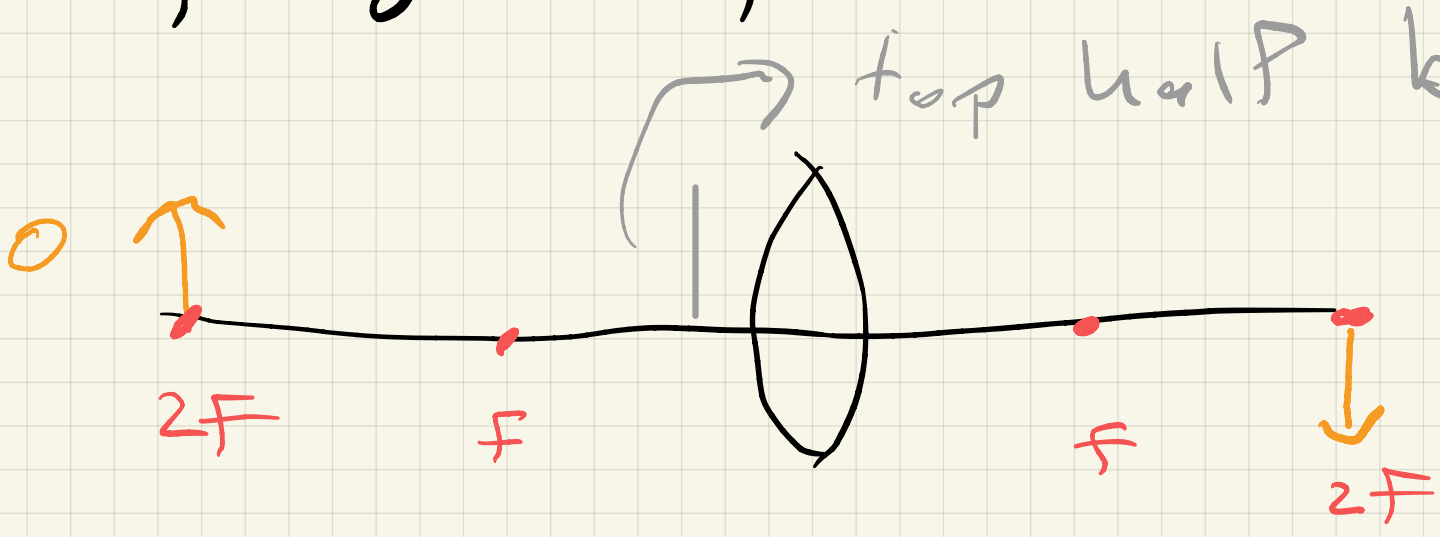
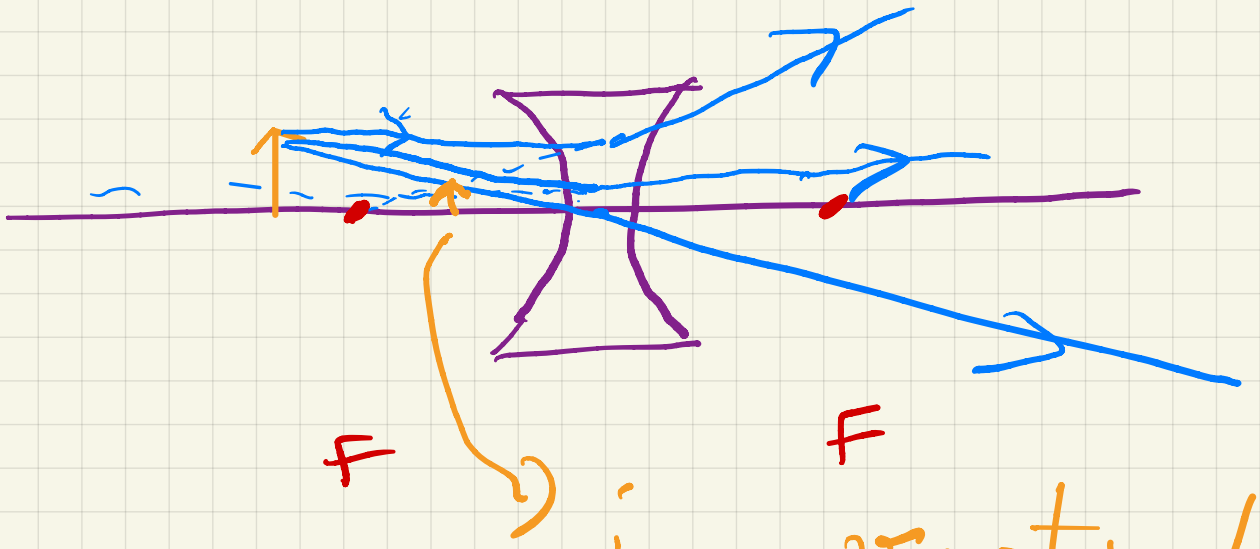


image is
virtual, magnified, upright

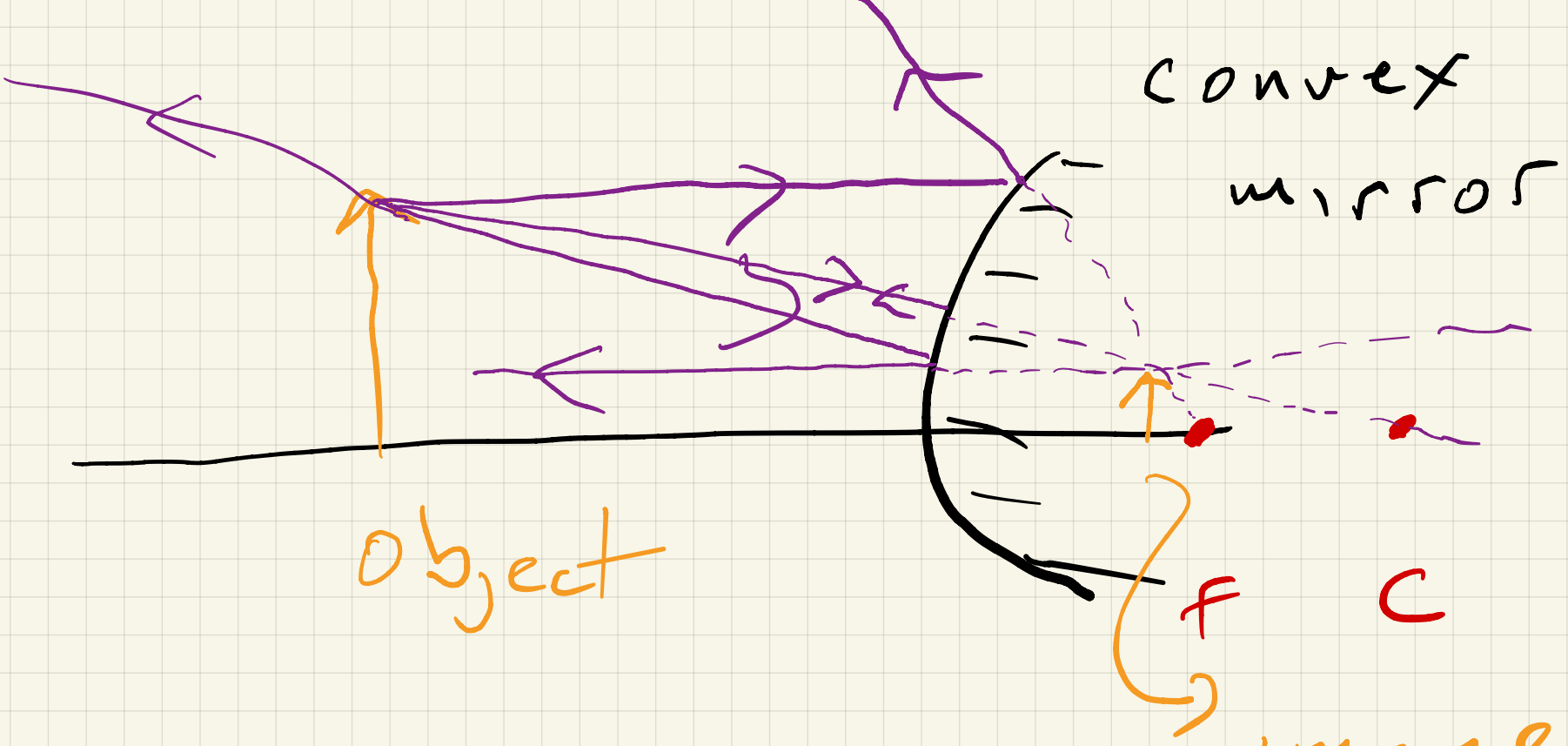


same image just dimmer

D diverging lens



i virtual, diminished upright


convex
mirror
object
F
C
image
virtual,
diminished
upright