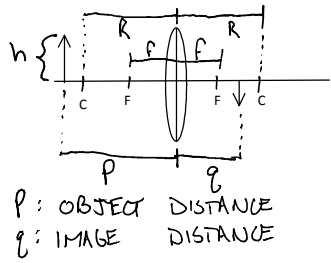
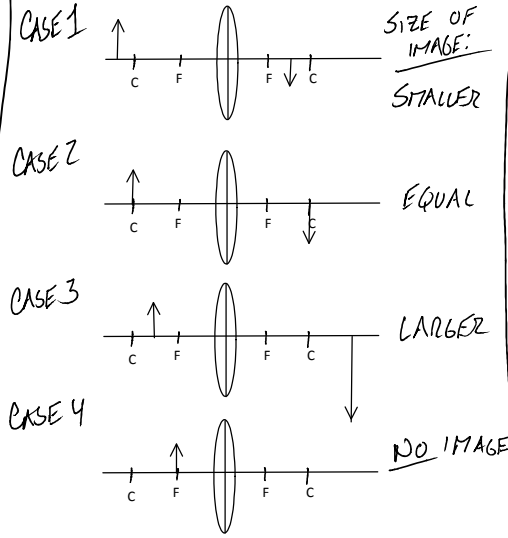


LAB 10: THIN LENS

DEFINITIONS: MIRROR: OPTICAL SYS. WHICH REFLECTS AN IMAGE
 LENS: OPTICAL SYSTEM w/2 REFRACTING SURFACES

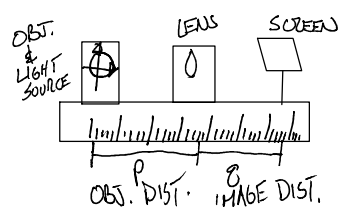
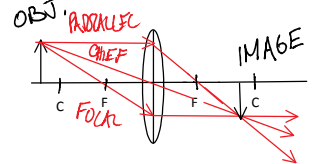


CONVERGING → REAL IMAGES & INVERTED FOCAL LENGTH



THIN LENS EQ

$$\frac{1}{f} = \frac{1}{p} + \frac{1}{q}$$

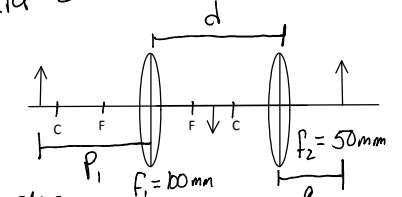


EXPERIMENT PART 1

MEASURE AND RECORD

- 1) IMAGE DISTANCE } mm
- 2) OBJECT DISTANCE } mm

PART 2



- TO CALC. q_2
- 1) $\frac{1}{f_1} = \frac{1}{p_1} + \frac{1}{q_1}$ FIND q_1
 - 2) $p_2 = d - q_1$ FIND p_2
 - 3) $\frac{1}{f_2} = \frac{1}{p_2} + \frac{1}{q_2}$ FIND q_2

4) % DIFF

$$\left| \frac{\text{MEAS.} - \text{CALC.}}{\text{CALC.}} \right| \times 100$$