

THIN LENS QUIZ 1.0

$$\frac{1}{d_o} + \frac{1}{d_i} = \frac{1}{f}$$

$$m = \frac{h_i}{h_o} = \frac{-d_i}{d_o}$$

For each problem:

- (a) Draw a Principal Ray Diagram.
- (b) Describe the image in the usual manner.
- (c) Calculate d_i and h_i (including any negative signs).

1. Double Convex or Converging Lens

Given an object distance of 8cm and a focal length of 12cm and an object height of 2cm.

2. Double Concave or Diverging Lens

Given an object distance of 8cm and a focal length of 10cm and an object height of 3cm.

3. Double Convex or Converging Lens

Given an object distance of 10cm and a focal length of 8cm and an object height of 4cm.