



Lesson 5—Curved Mirrors

1. a) real, inverted, same size
- b) real, inverted, larger
- c) virtual, erect, smaller
- d) real, inverted, smaller
- e) no image
- f) virtual, erect, smaller
- g) virtual, erect, larger

2.

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

$$\frac{-5.0 \text{ cm}}{5.0 \text{ cm}} = -\frac{d_i}{7.0 \text{ cm}}$$

$$d_i = 7.0 \text{ cm}$$

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

$$= \frac{1}{7.0 \text{ cm}} + \frac{1}{7.0 \text{ cm}}$$

$$f = 3.5 \text{ cm}$$

3.

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

$$\frac{1.0 \text{ cm}}{3.0 \text{ cm}} = -\frac{d_i}{6.0 \text{ cm}}$$

$$d_i = -2.0 \text{ cm}$$