

Physics 2205
Quiz 11—Form A

2 December, 1999

A slide projector consists of a 35-mm slide and a converging double-convex lens of focal length 100 mm.

1. If the slide is 110 mm behind the lens, how far in front of the lens is the image focused?

- a) 0.9 m
- b) 1.1 m
- c) 19 m
- d) none of the above

2. How large is the image of the slide?

- a) – 0.35 mm
- b) – 35 mm
- c) – 350 mm
- d) none of the above

Equations: $(1/f) = (1/d_i) + (1/d_o)$

$$m = (h_i/h_o) = - (d_i/d_o)$$

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Quiz 11—Form B

2 December, 1999

An object of height 3 cm stands 30 cm in front of a converging (concave) mirror of focal length 10 cm.

1. How far from the mirror is the image?

- a) 7.5 cm
- b) 15 cm
- c) 30 cm
- d) none of the above

2. What is the height of the image?

- a) - 1.5 cm
- b) - 3 cm
- c) - 6 cm
- d) none of the above

Equations: $(1/f) = (1/d_i) + (1/d_o)$

$$m = (h_i/h_o) = - (d_i/d_o)$$