

13 Images from mirrors and lenses — Part 2 — Answers

Answers

Work through these after you have tried the questions yourself.

2.1 it bends them to meet (converge) at its focal point.

2.2 $\frac{1}{d_i} = \frac{1}{f} - \frac{1}{d_o} = \frac{1}{5.0} - \frac{1}{20} = \frac{4-1}{20} = \frac{3}{20}$, so $d_i = 6.7$ cm.

2.3 $m = -\frac{d_i}{d_o} = -\frac{6.7}{20} = -0.33$.

2.4 inverted – the magnification is negative.

2.5 real image: a camera (or projector); virtual image: a magnifying glass (or a flat mirror).