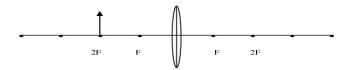
Convex Lenses Practice Worksheet

For each problem below, <u>draw the ray diagram</u> for the lens. Then use the thin lens equation and magnification equation to <u>determine image distance and height</u>. Last, <u>describe the image</u> formed (inverted or erect, enlarged or reduced, real or virtual). For question #6, you will also practice constructing a ray diagram from scratch.

1. A 15.0 cm object is placed 60.0 cm from a convex lens, which has a focal length of 15.0 cm.



2. A 15.0 cm object is placed 30.0 cm from a convex lens, which has a focal length of 15.0 cm.



3. A $15.0 \, \mathrm{cm}$ object is placed $16.0 \, \mathrm{cm}$ from a convex lens, which has a focal length of $15.0 \, \mathrm{cm}$.

