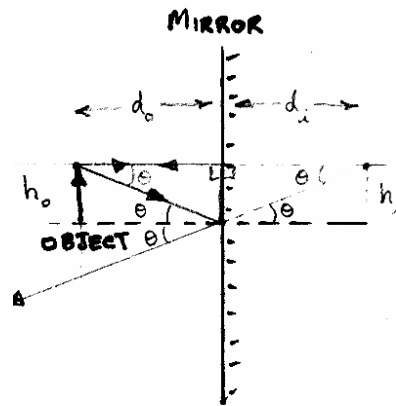


Draw some representative light rays using law of reflection:



The two triangles are congruent (Angle Angle Side). Thus,

$$d_i = d_o$$

$$h_o = h_i$$

The image appears behind the mirror the same distance as the object is in front of the mirror.
The image appears the same height as the object.