

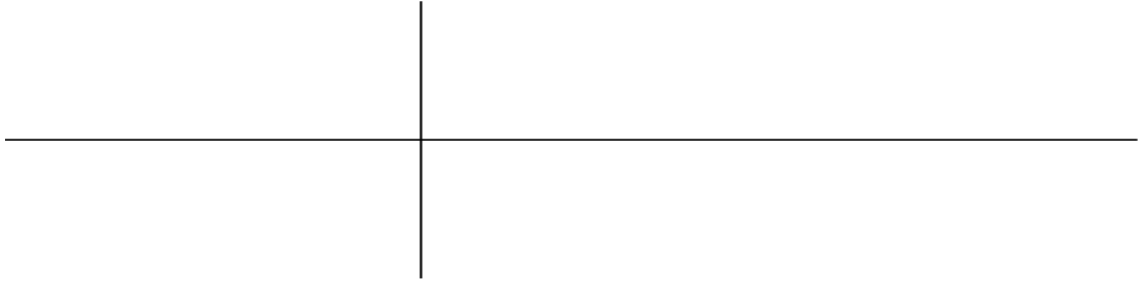
Name \_\_\_\_\_

**PHYSICS WORKSHEET - SPHERICAL LENS CONSTRUCTIONS**

Carefully construct a ray diagram for each of these problems, showing the object, the image and all of the missing values or measurements.

1. An object 4 cm high is placed 20 cm in front of a converging (convex) lens with a 12 cm focal length. A 1:4 scale is suggested.

$d_i =$  \_\_\_\_\_ cm,  $h_i =$  \_\_\_\_\_ cm,  $m =$  \_\_\_\_\_



2. An object is 5 cm in front of a convex lens of focal length = 7.5 cm.  $h_o = 11$  cm. Pick a convenient scale.

$d_i =$  \_\_\_\_\_ cm,  $h_i =$  \_\_\_\_\_ cm,  $m =$  \_\_\_\_\_

