Curved Mirror Calculations

Variables:

do = object distance	**ho = object height**
di = image distance (negative if behind mirror)	**hi = image height (negative if inverted)**
f = focal length (negative if convex mirror)	**M = magnification**

1. An object is 30.0 cm from a concave mirror of 15.0 cm focal length. The object is 1.8 cm high. Use the mirror equation to answer the following:
    a. Where is the image located? b. How high is the image?

2. An object is placed 25.0 cm away from a concave mirror that has a focal length of 5.00cm.
    a. Where is the image located? b. If the object is 8.0 cm high, what is the height of the image?

3. A convex security mirror in a warehouse has a center of curvature of -1.0m. A 2.0m high forklift is 5.0m from the mirror.
    a. What is the location of the image? b. What is the size of the image?