## Mirror Ray Diagram Equation Lab

1. A concave mirror with a focal length of 10.0 cm creates a real image 30.0 cm away on its principal axis; the corresponding object is located how far from the mirror?
a. 20.0 cm
b. 15.0 cm
c. 7.5 cm
d. 5.0 cm
2. A concave mirror forms a real image at 25.0 cm from the mirror surface along the principal axis. If the corresponding object is at a 10.0 cm distance, what is the mirror's focal length?
a. 1.4 cm
b. 16.7 cm
c. 12.4 cm
d. 7.1 cm
3. If a virtual image is formed 10.0 cm along the principal axis from a convex mirror of focal length -15.0 cm , what is the object distance from the mirror?
a. $30.0 \mathrm{~cm} \mathrm{b} .10.0 \mathrm{~cm} \mathrm{c}$.6.0 cm d. 3.0 cm
