

Date of submission: 12th Nov'16

1. An object is placed at a distance of 5 m from a convex mirror of radius of curvature 20 cm where is the image formed and what is its nature?
2. What is the position of an image when an object is placed at a distance of 20 cm from a concave mirror of focal length 20 cm?
3. An object is placed at distance of 10cm from the pole of a mirror, and the image of the object is formed at a distance of 30 cm from the mirror on the same side as the object. Is the mirror concave or convex? What is its focal length?
4. A 4.00 cm tall light bulb is placed a distance of 45.7 cm from a concave mirror having a focal length of 15.2 cm. Determine the image distance and the image size.
5. Determine the image distance and image height for a 5.00-cm tall object placed 45.0 cm from a concave mirror having a focal length of 15.0 cm.
6. Determine the image distance and image height for a 5.00-cm tall object placed 30.0 cm from a concave mirror having a focal length of 15.0 cm.
7. Determine the image distance and image height for a 5.00-cm tall object placed 20.0 cm from a concave mirror having a focal length of 15.0 cm.
8. Determine the image distance and image height for a 5.00-cm tall object placed 10.0 cm from a concave mirror having a focal length of 15.0 cm.
9. A magnified, inverted image is located a distance of 32.0 cm from a concave mirror with a focal length of 12.0 cm. Determine the object distance and tell whether the image is real or virtual.
10. An inverted image is magnified by 2 when the object is placed 22 cm in front of a concave mirror. Determine the image distance and the focal length of the mirror.
11. If an object of height 4 cm is placed at distance of 12 cm from a concave mirror having focal length 24 cm, find the position, nature and the height of the image.
12. An object of height 6 cm is placed at a distance of 10 cm from a convex mirror with radius of curvature 30 cm. Find the position, nature and the height of its image.
13. An object of 5 cm height is placed at a distance of 15 cm from a concave mirror. Find the position, height and nature of its image. The focal length of the mirror is 10 cm.
14. An object of 10 cm height is placed at a distance of 10 cm from a convex mirror. The radius of curvature of the mirror is 30 cm. Find the position, height and nature of its image.

