

### Answer on Question #46996-Physics-Optics

If rays of light parallel and close to the principal axis are incident on a ----- mirror, they converge to a point after reflection from the mirror

plane

convex

concave

diffuse

### Answer

If rays of light parallel and close to the principal axis are incident on a concave mirror, they converge to a point after reflection from the mirror.

Rays of light from an object that is infinitely far away are parallel by the time we see them. Such parallel rays, after reflecting from a concave spherical mirror, are bent so they converge on a single point. They pass through that point and then diverge from that point. This point from which the light seems to have originated is called the focal point and is labeled by a capital letter F. The distance from the mirror to the focal point is the focal length and is labeled with a small letter f.

