

Answer on Question #46391, Physics, Optics

Question

The image of an object is found to be upright and reduced in size. What type of mirror is used to produce such an image?

- Concave
- Convex
- Both mirrors
- None of the above

Solution

If the object is closer than the focal length, a **concave mirror** will form a virtual, upright image.

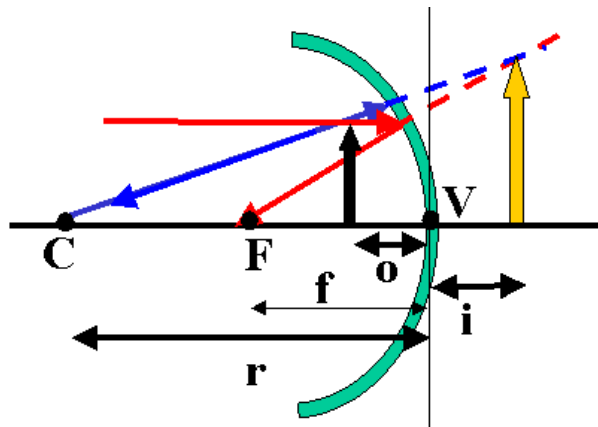


Image is **larger** and **upright**.

If the object is outside the focal length, a **concave mirror** will form a real, inverted image.

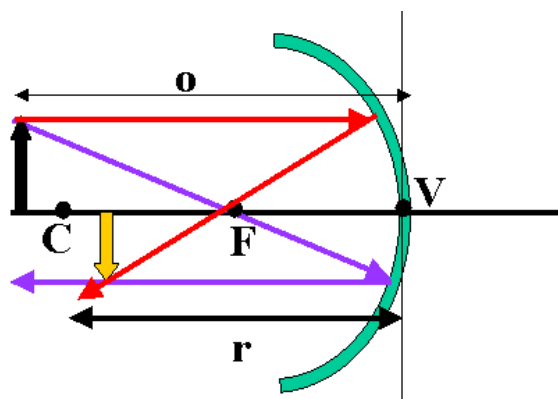
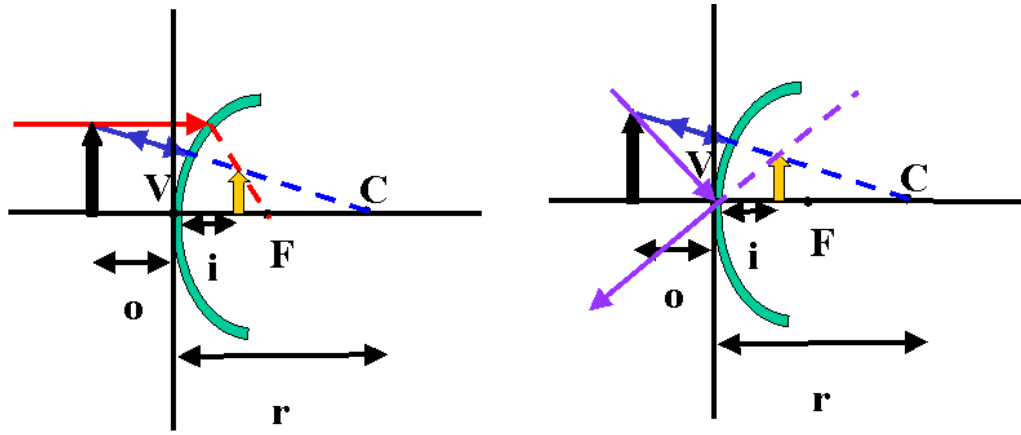


Image is real, **inverted** and **smaller**.

But, for the convex mirror the image is always virtual, **upright** and it is **smaller** than the object



Answer Convex