

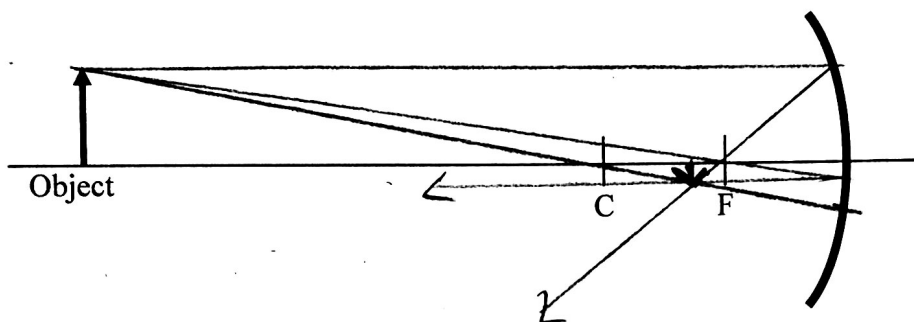
# Mirror Ray Diagram

**Directions:** Use the rules from the *Optical Ray Diagram Rules* information sheet, follow along with your teacher to draw the ray diagrams for the various cases of optical references.

## Curved Mirrors

### Spherical Concave Mirror

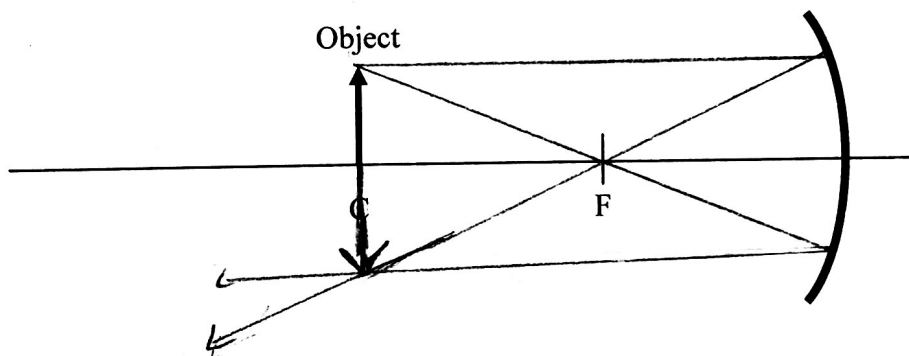
#### Case I: Object is far beyond C (at $\infty$ )



Case I: Image Appears:

1. Location: closer (between C and F)
2. Orientation: inv.
3. Size: small
4. Image Type: real

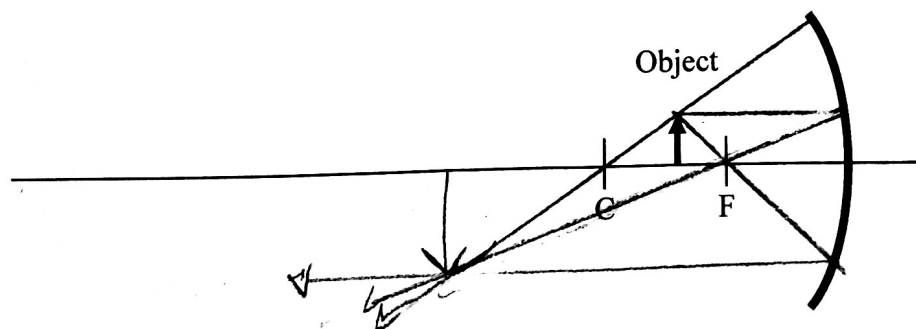
#### Case II: Object is at C



Case II: Image Appears:

1. Location: same distance (C)
2. Orientation: inv.
3. Size: same
4. Image Type: real

#### Case III: Object is between C and F

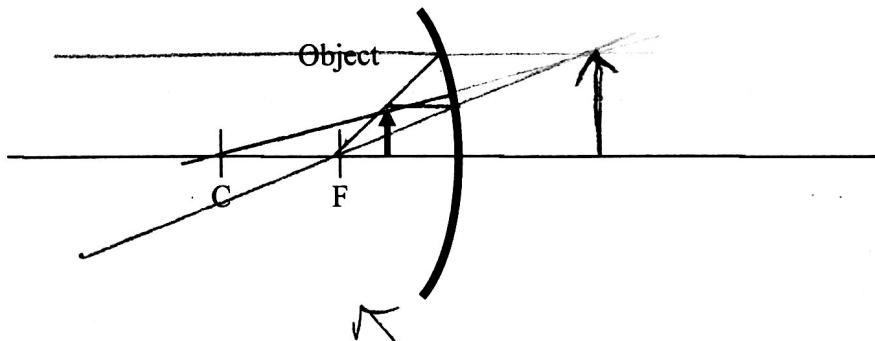


Case III: Image Appears:

1. Location: further (beyond C)
2. Orientation: inv.
3. Size: larger
4. Image Type: real

(Over)

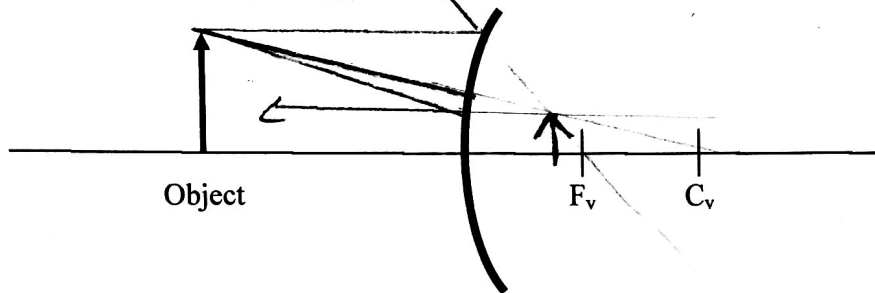
**Case IV: Object is inside F (between F and Mirror)**



**Case IV: Image Appears:**

1. Location: behind mirror
2. Orientation: up
3. Size: larger
4. Image Type: virtual

**Spherical Convex Mirror Has only ONE case.**



**Convex Mirror's Image Appears:**

1. Location: behind mirror
2. Orientation: up
3. Size: small
4. Image Type: virtual