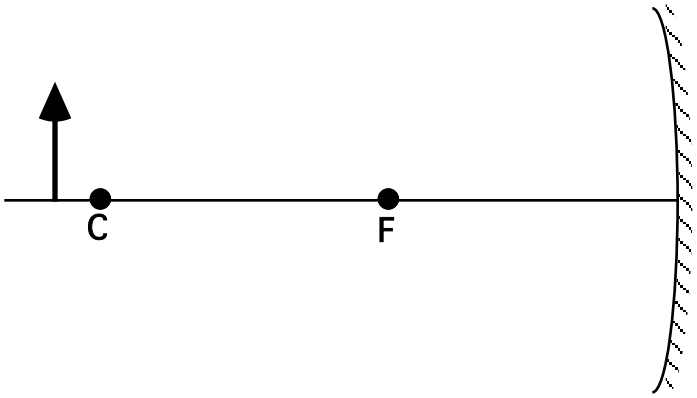
SNC2D Worksheet

Reflection in Curved Mirrors: Ray Diagrams

Converging Mirrors: 3 Golden Rules

1. Any ray travelling parallel to the principal axis is reflected through the focus (F).
2. Any ray travelling through the focus (F) is reflected parallel to the principal axis.
3. Any ray travelling through the centre of curvature (C) is reflected back through the centre of curvature.

Case 1: Object beyond C



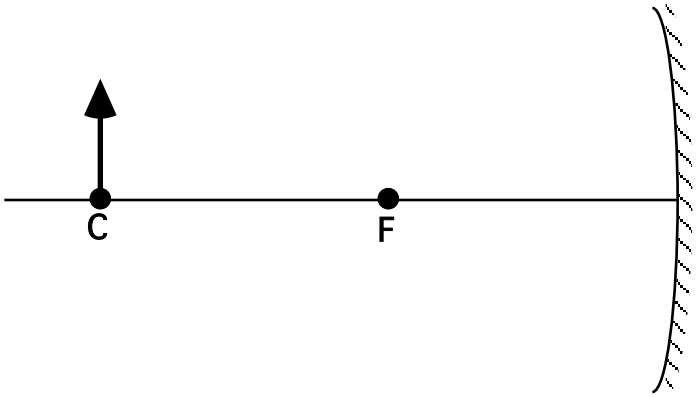
Size:

Attitude:

Location:

Type:

Case 2: Object at C



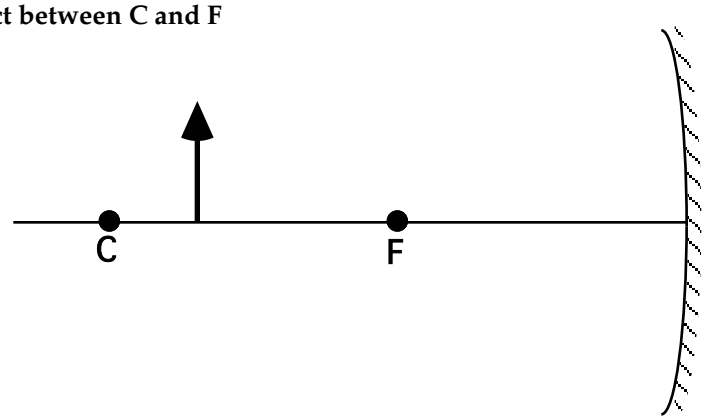
Size:

Attitude:

Location:

Type:

Case 3: Object between C and F



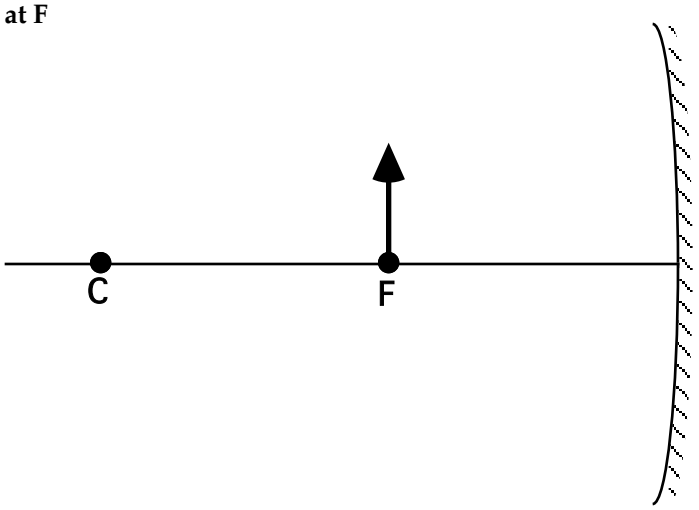
Size:

Attitude:

Location:

Type:

Case 4: Object at F



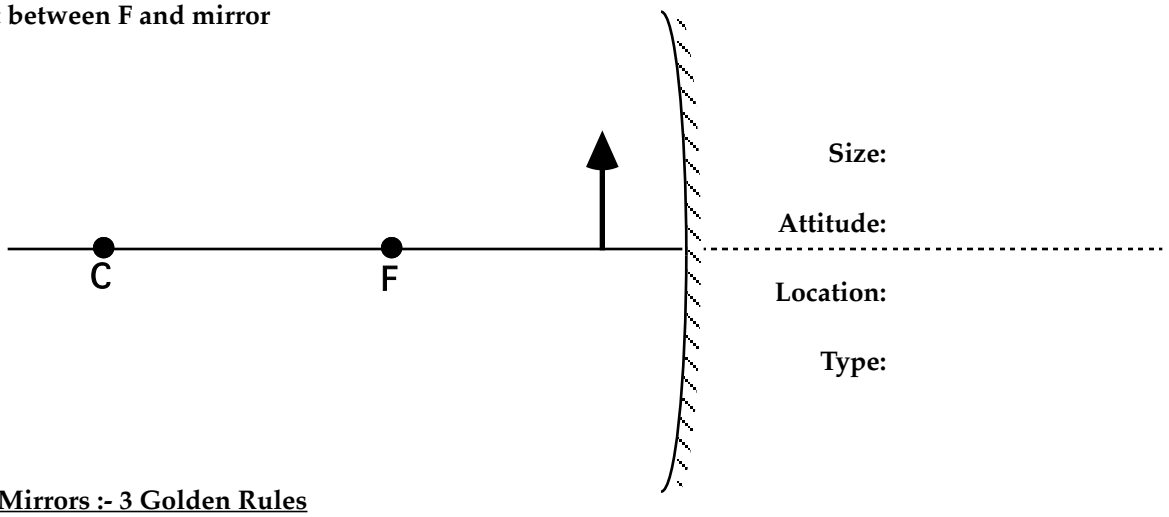
Size:

Attitude:

Location:

Type:

Case 5: Object between F and mirror



Size:

Attitude:

Location:

Type:

<u>Diverging Mirrors :- 3 Golden Rules</u>

1. Any ray travelling parallel to the principal axis is reflected such that it **appears to** pass through the virtual focus (F′).
2. Any ray **appearing to** travel through the **virtual** focus (F') is reflected parallel to the principal axis.
3. Any ray **appearing** to travel through the centre of curvature (C) is reflected back along itself.

Case 1: Anywhere !!

Size:

Attitude:

Location:

Type: