ODM EDUCATIONAL GROUP
Changing your Tomorrow

LIGHT REFLECTION AND REFRACTION

CHAPTER NO.10

SUB: PHYSICS

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Points to be covered

- Terms related to spherical mirror
- Rules for drawing ray diagram
- Image formation by a concave mirror

LEARNING OUTCOMES

- Students will be able to

➢ Identify different types of mirrors.

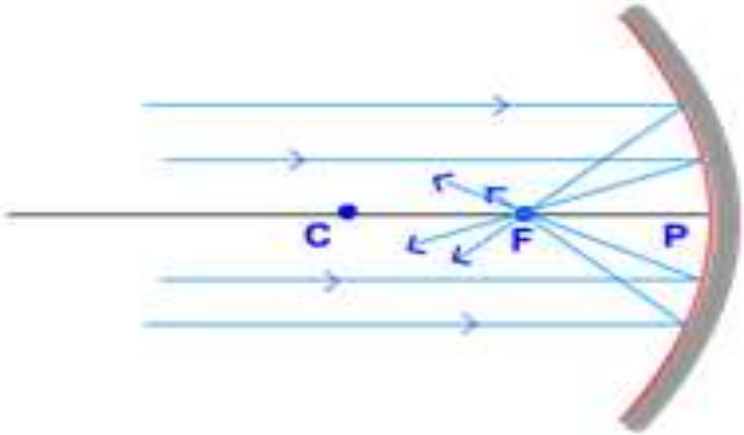
➢ They can draw ray diagrams and illustrate formation of image by spherical mirrors.

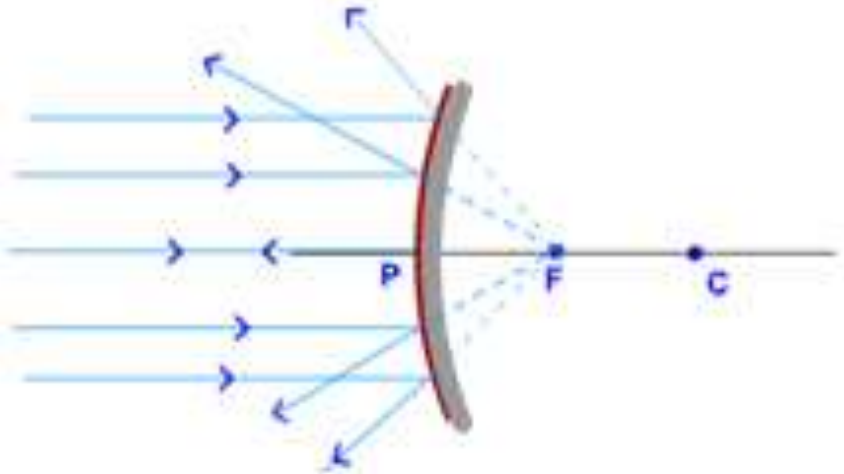
➢ Differentiate between real and virtual images.

RECAPITULATON OF PREVIOUS TOPIC

1. What are the characteristics of image formed by a plane mirror?
2. Define a concave mirror.
3. Define a convex mirror.
4. Converging and diverging nature of spherical mirrors.

RECAPITULATON OF PREVIOUS TOPIC

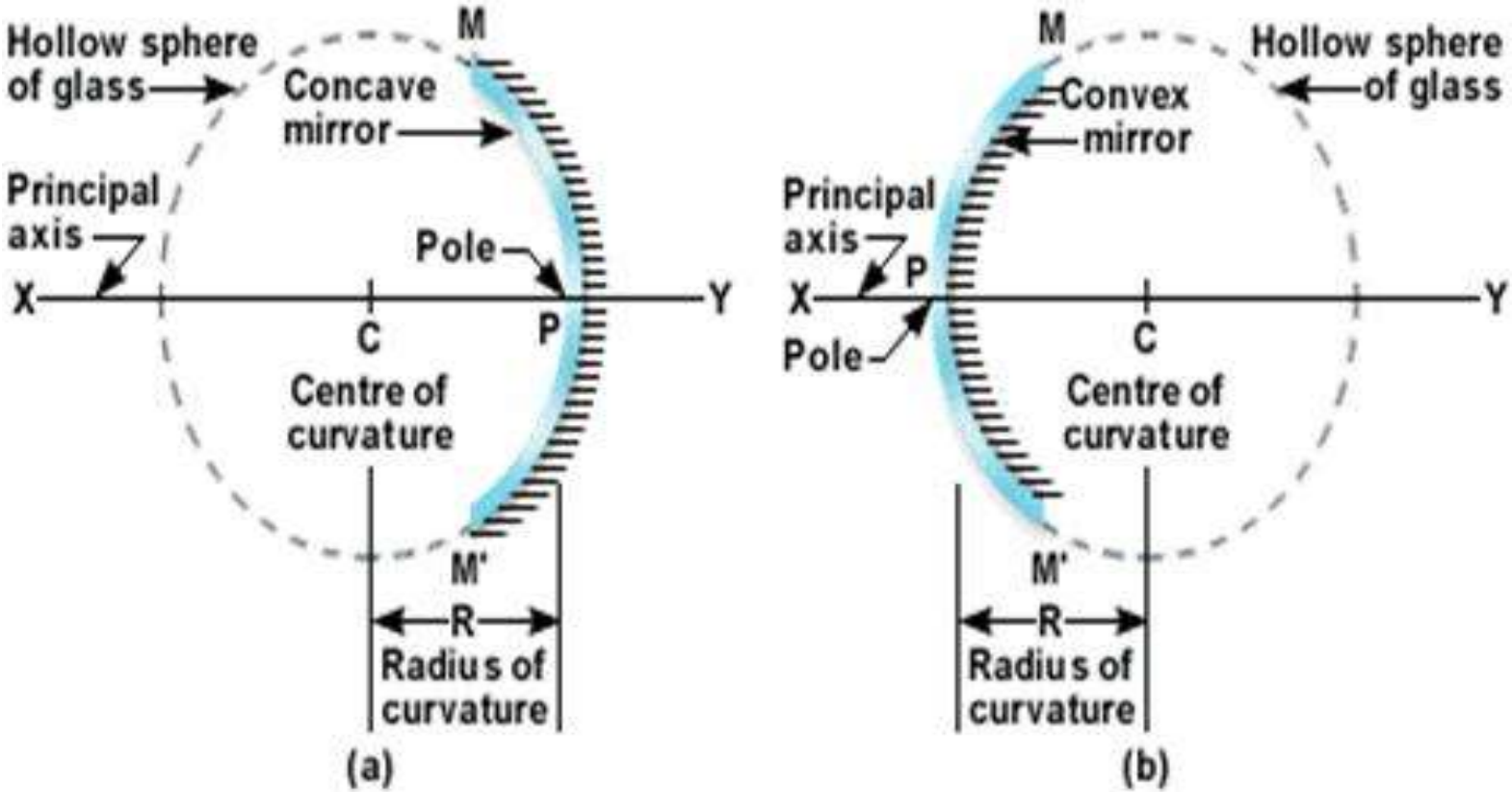




Terms related to spherical mirrors

- Pole
- Focus
- Focal Length
- Centre of curvature
- Radius of curvature
- Principal Axis

Terms related to spherical mirrors



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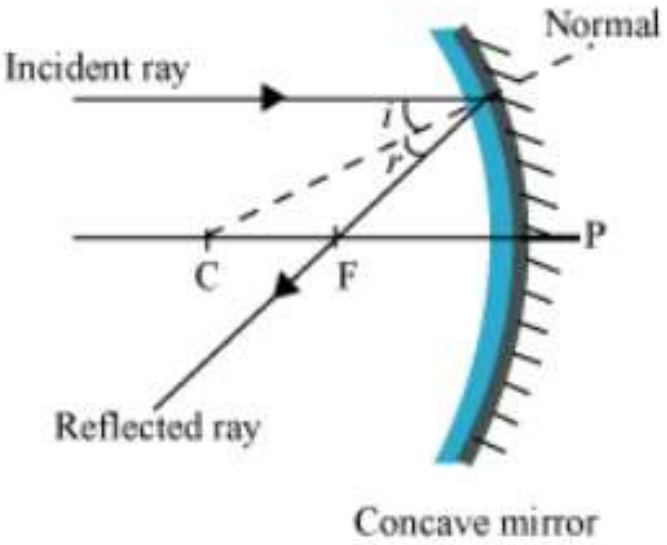
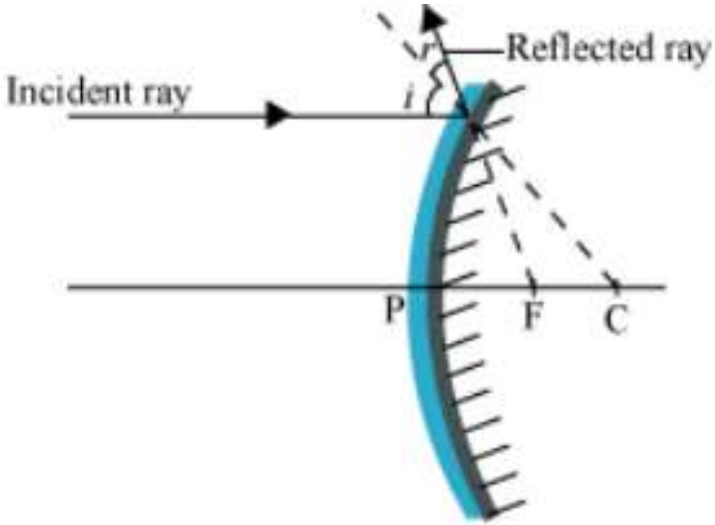
RULES FOR DRAWING RAY DIAGRAMS
RULE:1

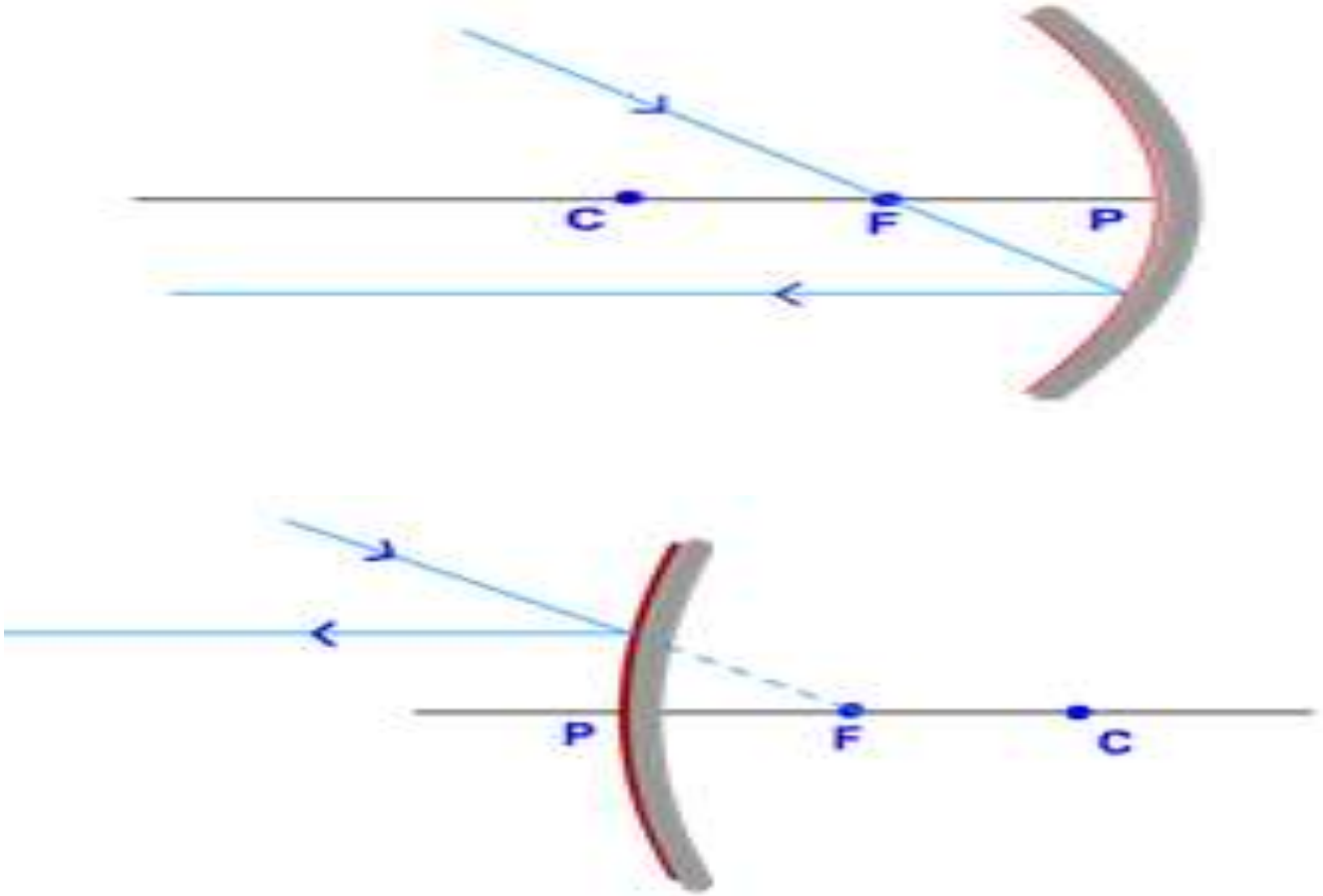


Concave mirror

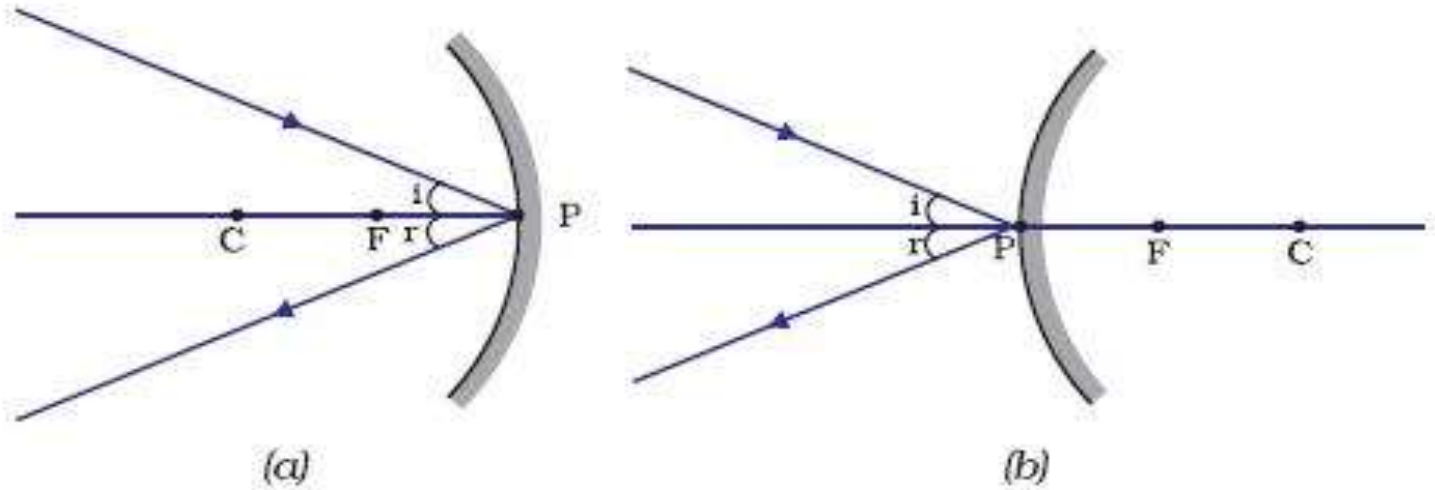


Convex mirror

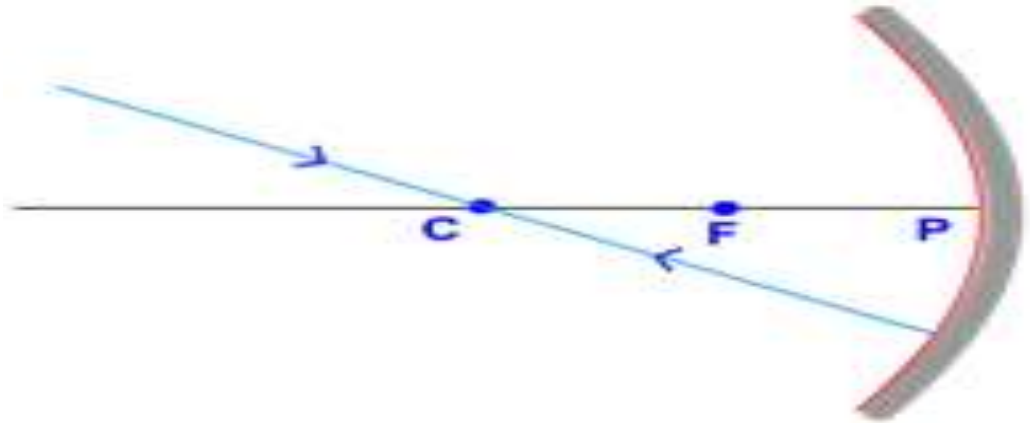
RULES FOR DRAWING RAY DIAGRAMS
RULE:2

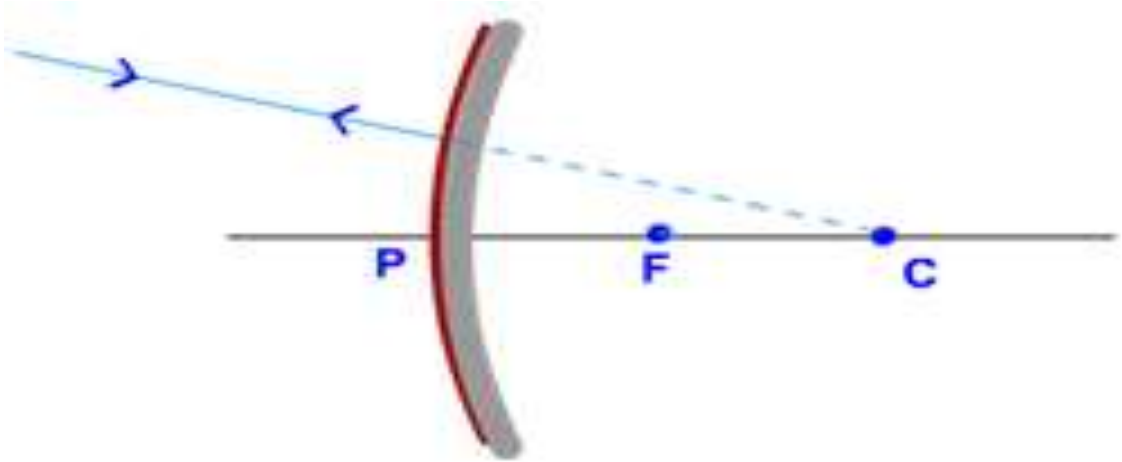


RULES FOR DRAWING RAY DIAGRAM
RULE:3



RULES FOR DRAWING RAY DIAGRAM
RULE:4



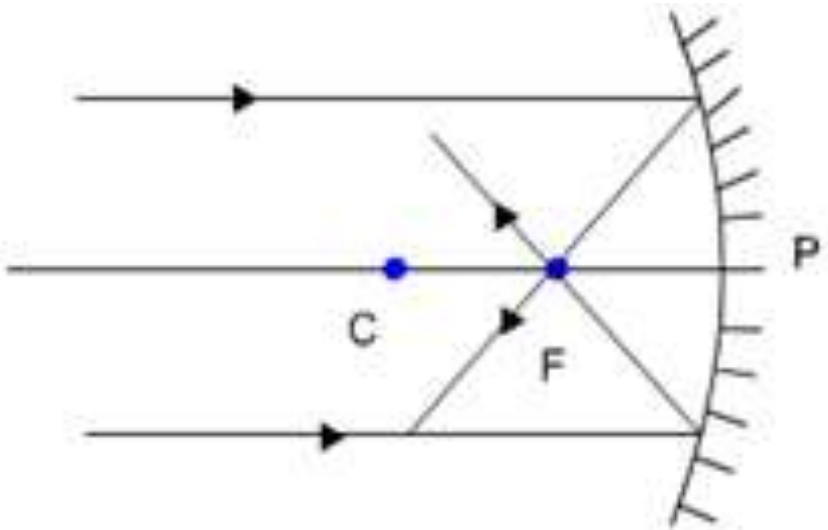


RULES FOR DRAWING RAY DIAGRAMS:

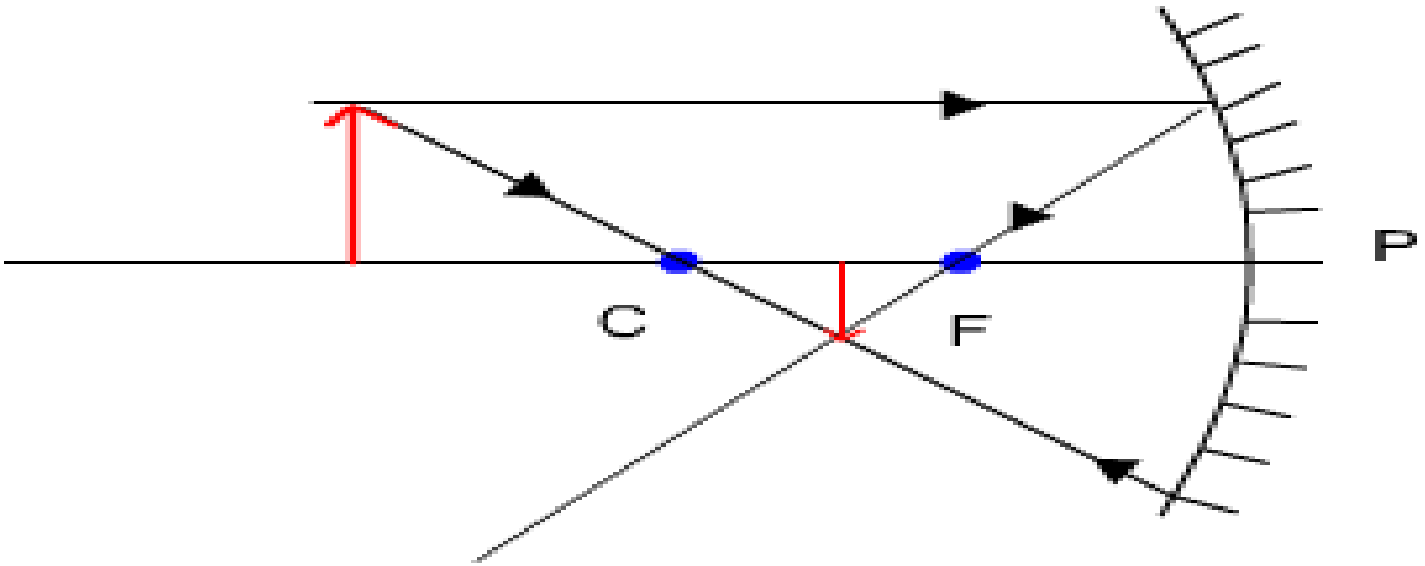
https://youtu.be/BuYkp5kuPHE

IMAGE FORMATION BY A CONCAVE MIRROR

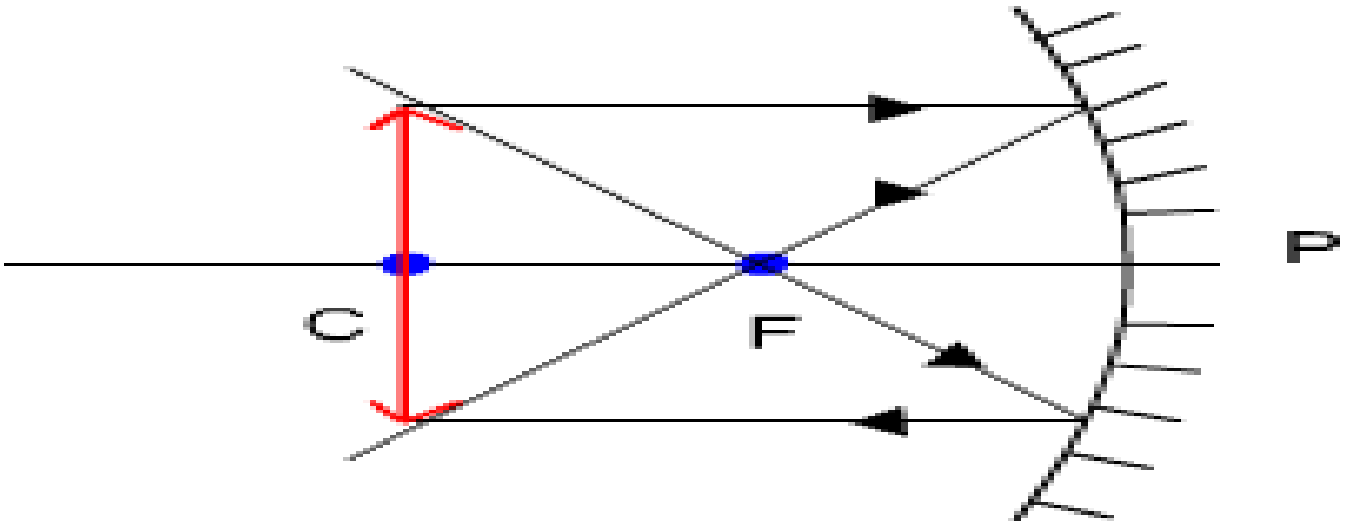
1. When the object is at infinity:



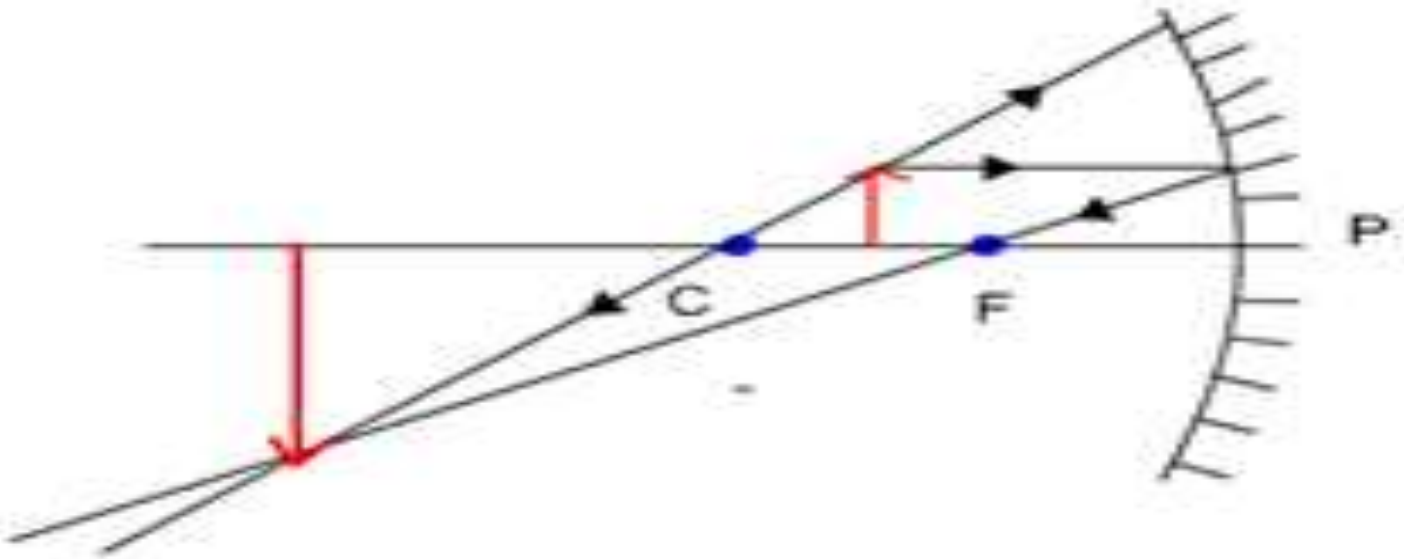
2. When the object is beyond C



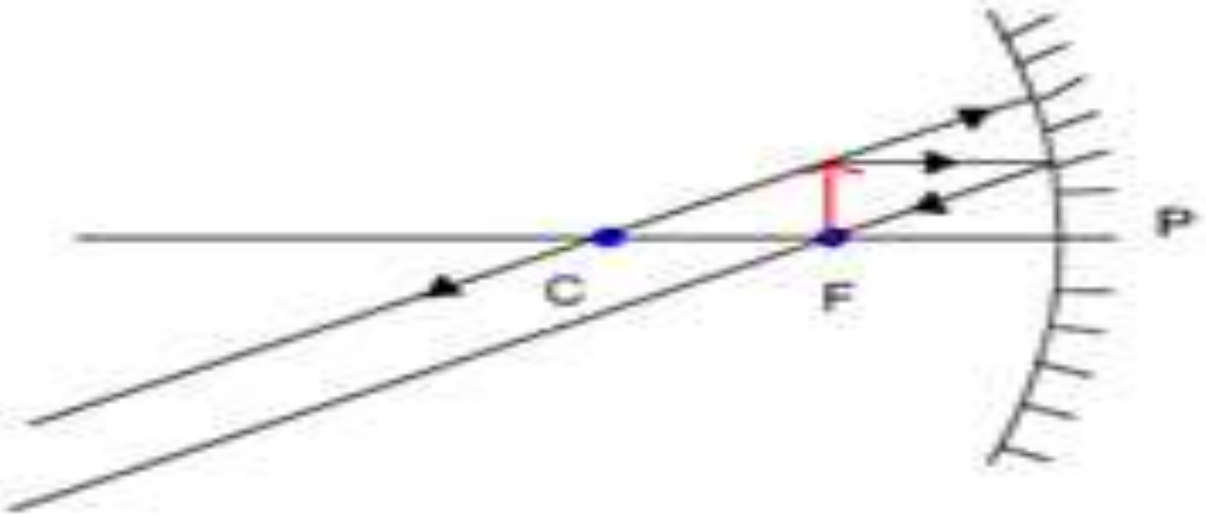
3. When the object is at C:



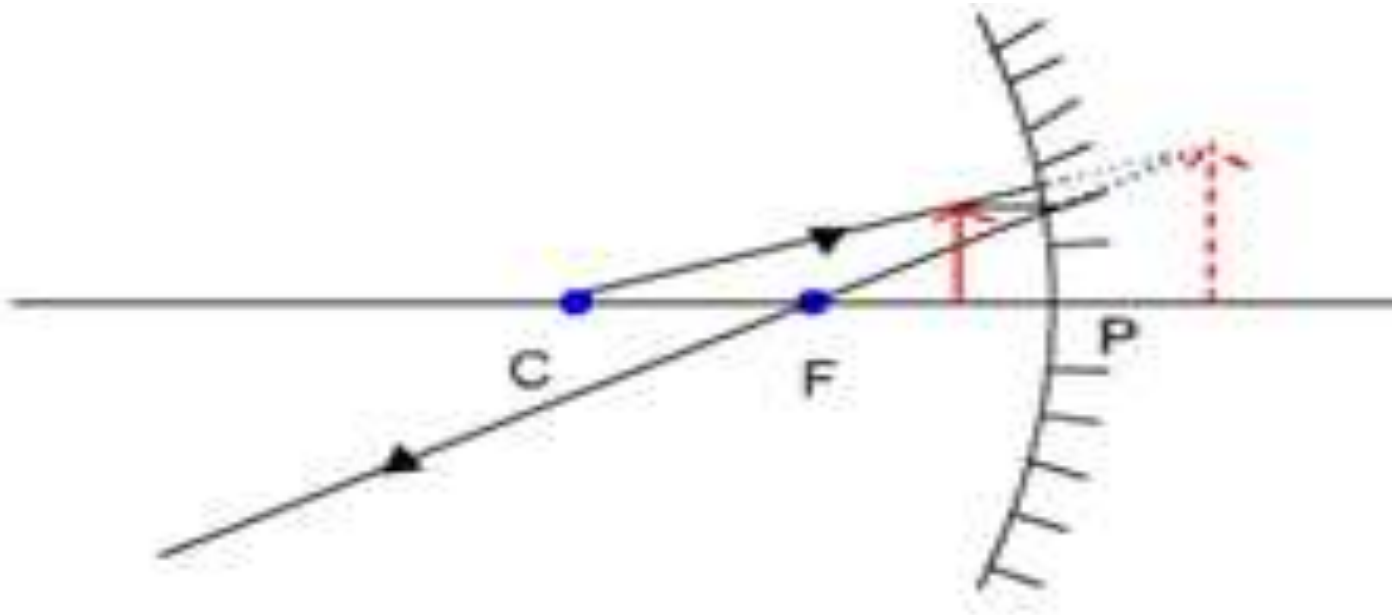
4. When the object is between C and F;



5. Object at Principal Focus (F):



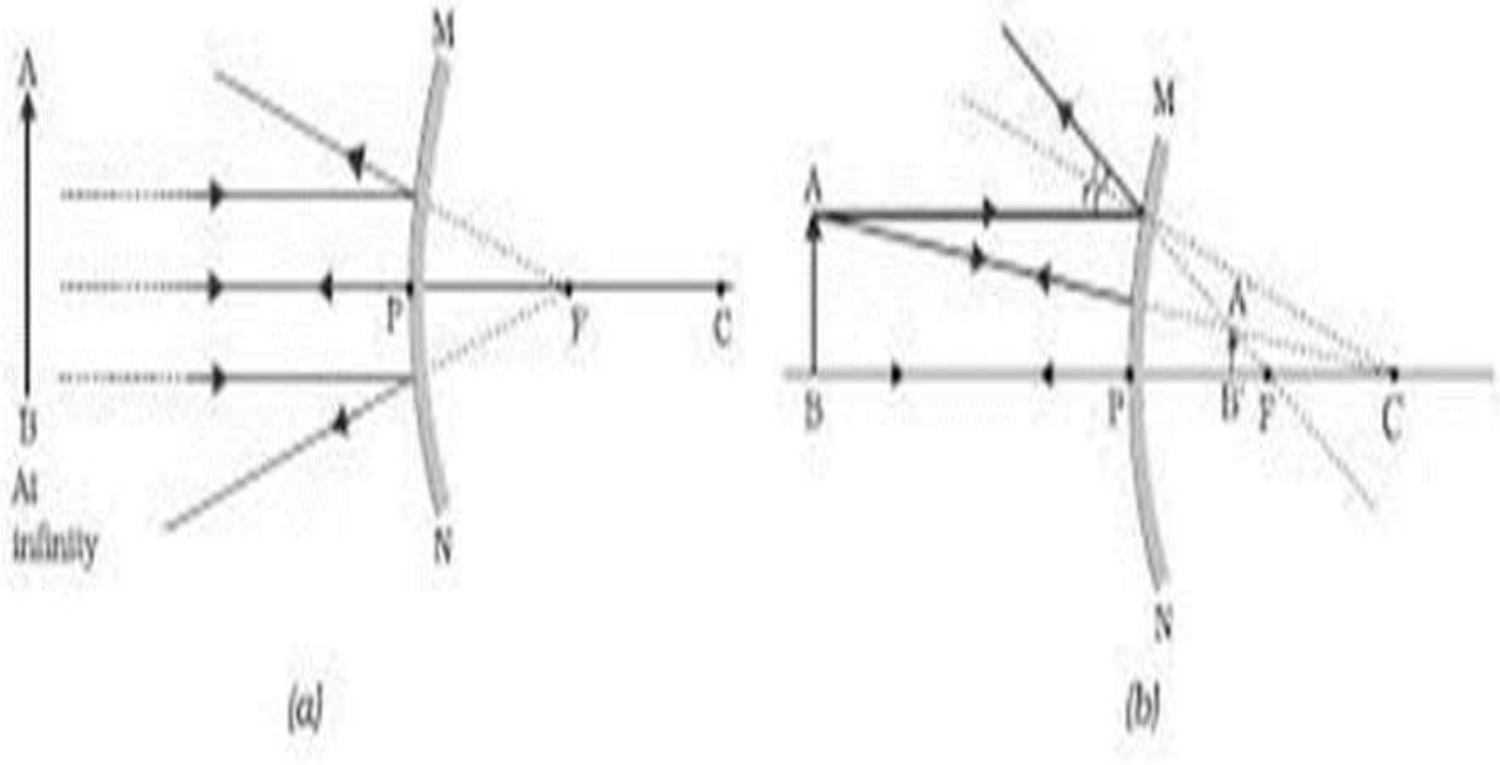
6. Object between F and C:



RAY DIAGRAMS (CONCAVE MIRROR)

- https://youtu.be/OHXOwz1NLh0

Ray diagrams for convex mirror



Home Assignment

1. Where is the image formed when the object is placed

- At Infinity
- Beyond C
- At C
- Between C and F
- At F
- Between F and C of a concave mirror.

THANKING YOU

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