'm' denotes the magnification.

$$m = \frac{I}{O} = \frac{\text{Distance of Image}}{\text{Distance of object}} = \frac{v}{u}$$

$$\boxed{m = -\frac{v}{u}}$$ * Learn formula

Learn *

[m = -ve for Real Image (Inverted Image)
m = +ve for Virtual Image (Erect Image)]

*Q Write uses of a Concave mirror?

Ans :- (i) As a shaving mirror (a mirror of large focal length and a large aperture is used)

(ii) In torch, search light and head light of automobiles etc. a Concave mirror is used as a reflector to obtain a parallel beam of light.

(iii) As a doctor's head mirror.

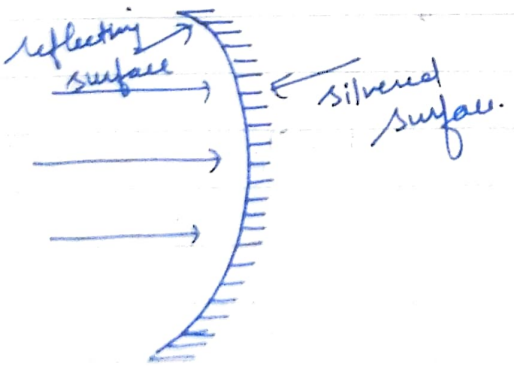
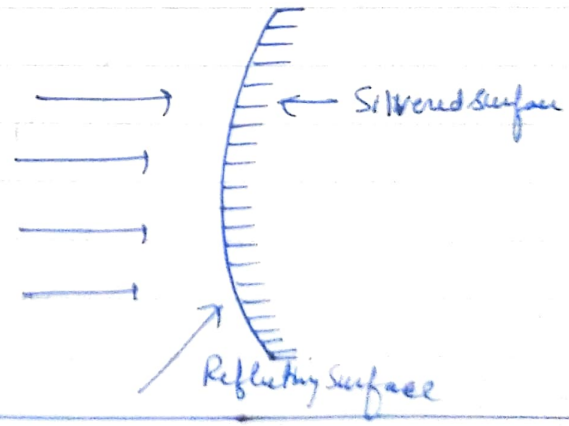
Q Write uses of a Convex mirror?

Ans :→ (i) It is used in street lamps as a reflector to diverge light over a large area.

(ii) As a rear view mirror in vehicles to see all the traffic approaching from behind.
It provides wider field of view as compared to plane mirror of same size.

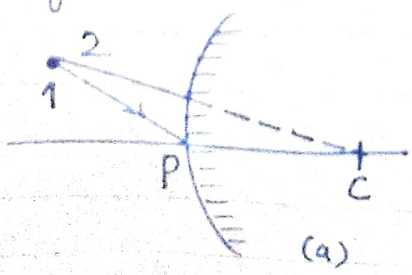
Q Write three points of difference b/w a Convex and a Concave mirror?

Ans :→

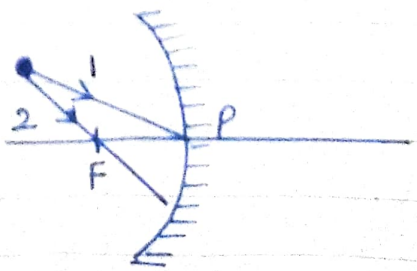
	Concave Mirror	Convex mirror
(1)	It is made by silvering the outer surface of part of hollow sphere, So reflection takes place from inner surface.	It is made by silvering the inner surface of the part of the hollow sphere, So reflection takes place from the bulging surface.
(2)	In this mirror, light rays will Converge after reflection So it is also called a Converging mirror.	In this mirror, light rays will diverge after reflection. So, it is called a diverging mirror.
(3)	The image formed by the Concave mirror is real as well as virtual.	The image formed by the Convex mirror is always Virtual for all positions of Objects in front of it.
(4)		

From Text-Exercise

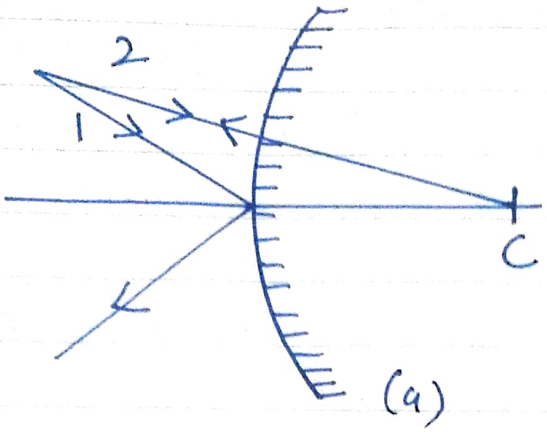
Ques Complete the following diagrams and draw the reflected rays for incident rays 1 and 2.



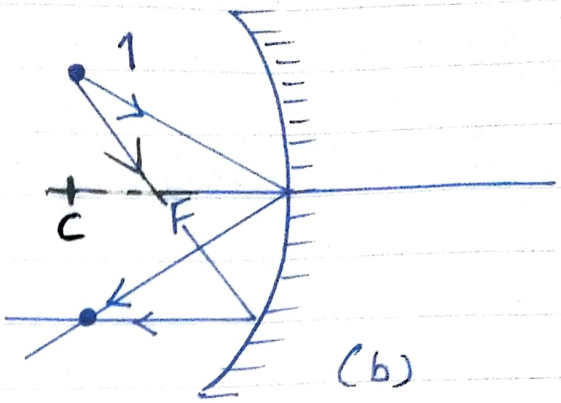
(a)



Ans

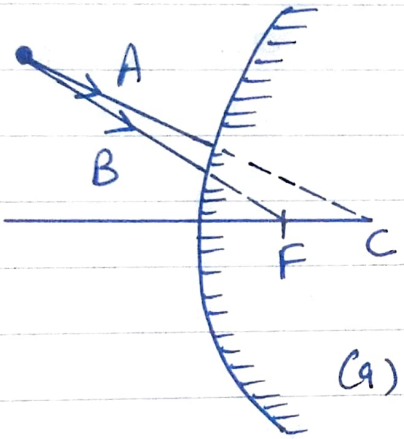


(a)

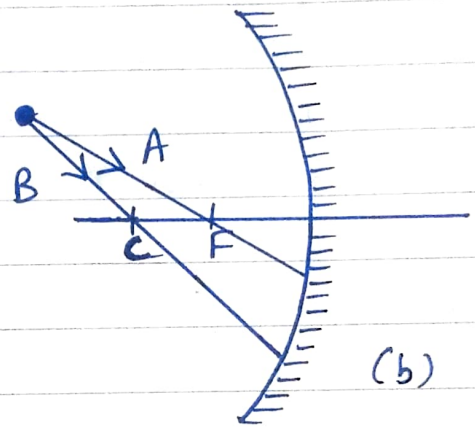


(b)

Qus:→ Complete the following diagrams by drawing the reflected ray of each of the incident ray A and B.

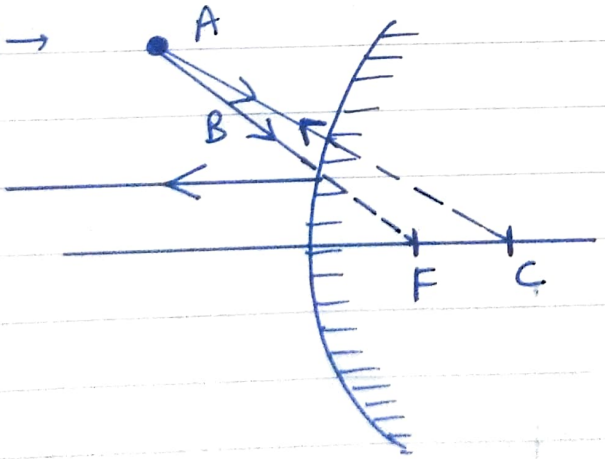


(a)

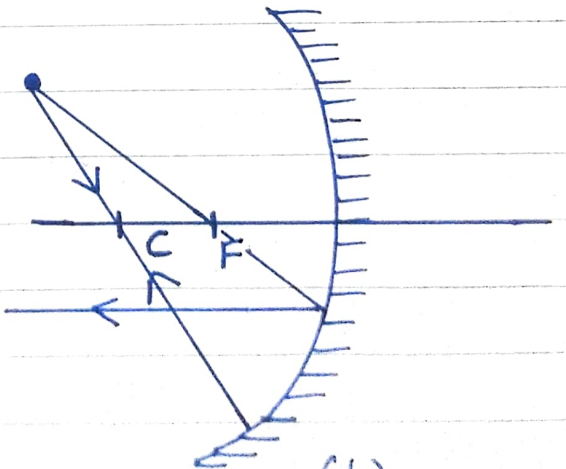


(b)

Ans :→



(a)



(b)

to be Continued