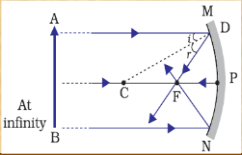
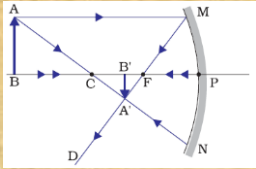
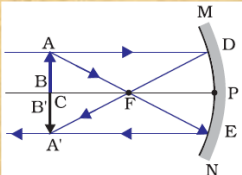
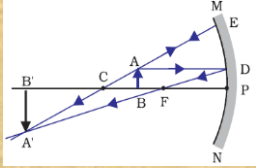
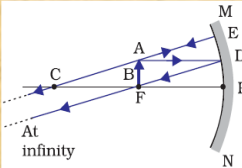
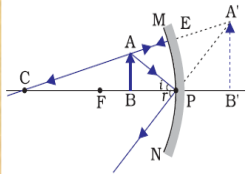


Chapter 10

REFLECTION AND REFRACTION

IMAGE FORMATION DUE TO CONCAVE MIRROR:

Position of the Object	Position of the Image	Magnification & sign convex	Real Image / Virtual Image	Inverted Erecting	Ray diagram
At ∞ i.e., $u \gg 2f$	At focus $v = f$ & -ve	$M \ll 1$ And negative	Real	Inverted	
Beyond "C" $u > 2f$ $> R$	Between F^1 & C i.e., $V > F$ $V < R$ & $V < 2f$ / -ab	$M < 1$ Negative	Real	Inverted	
At "C" $u = R$ $u = 2f$	At "C" $V = u$ $V = 2f$ & -ve	$M = 1$ & Negative	Real	Inverted	
Between C & f $u > F$ $u < R$ or $2f$	Beyond 'C' $V > R$ or $2f$ & -ve	$M > 1$ & negative	Real	Inverted	
At 'F' $u = f$	At " ∞ " $V = \infty$ & -ve	$M \gg 1$ & Negative	Real	Inverted	

Between P & F $u < f$	Beyond the mirror is the	$M > 1$ But positive	Virtual	Erect	
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