

## IMAGE FORMED BY CONCAVE MIRROR/ अवतल दर्पण द्वारा निर्मित प्रतिबिम्ब

$$C = 2F$$



①  $\infty$ , (object =  $\infty$ )

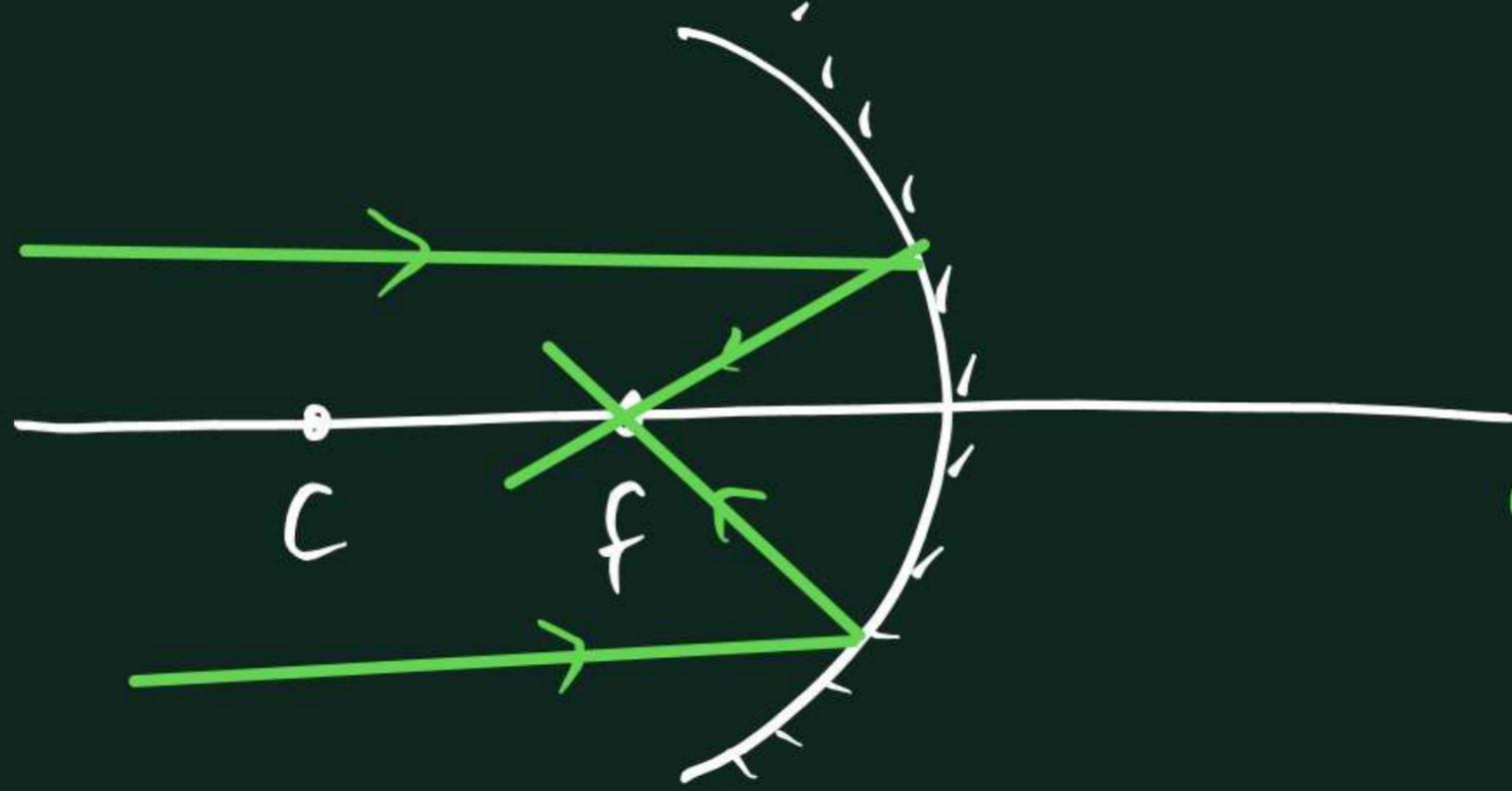


Image = at F

बहुत छोटा (Highly Diminished)

Real & Inverted

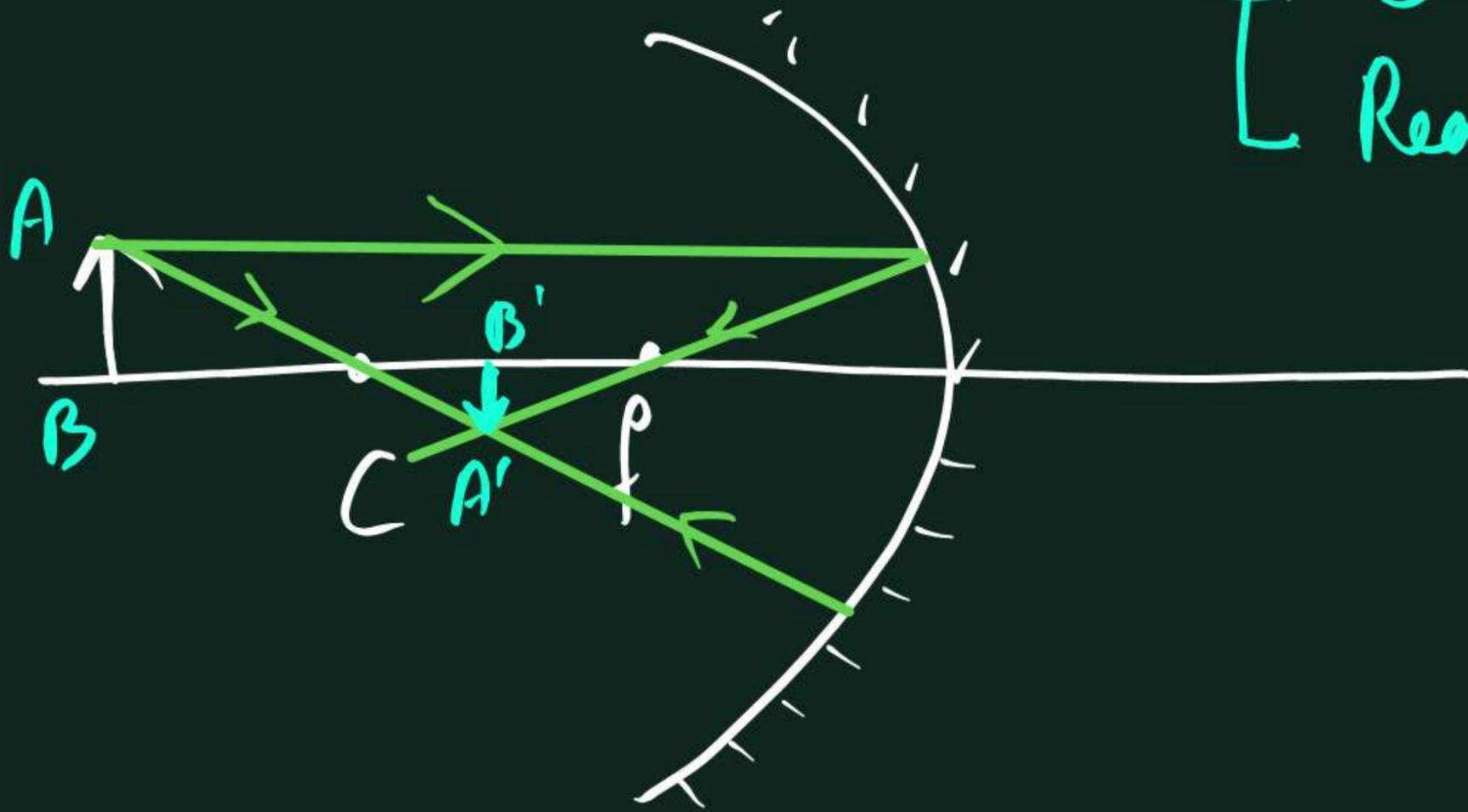
दिएतवियन बिंदु (3लटा)

②

उत्त = object ( $u > f$ )  
यदि =

$$\text{Image} = \boxed{C-f}$$

↳  $E < O$  (Diminished)  
↳ Real & Inverted



③ दस्तु = C

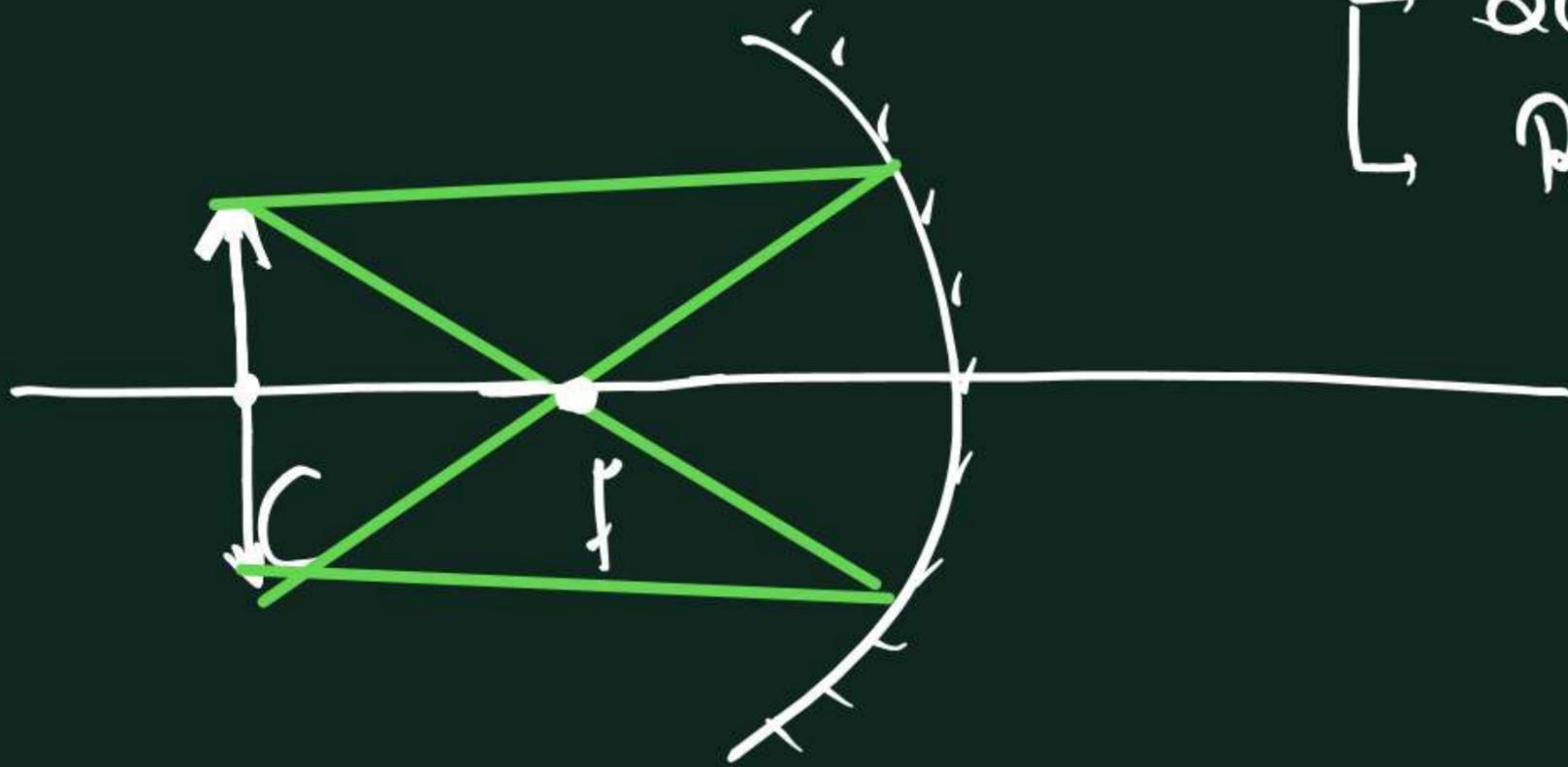


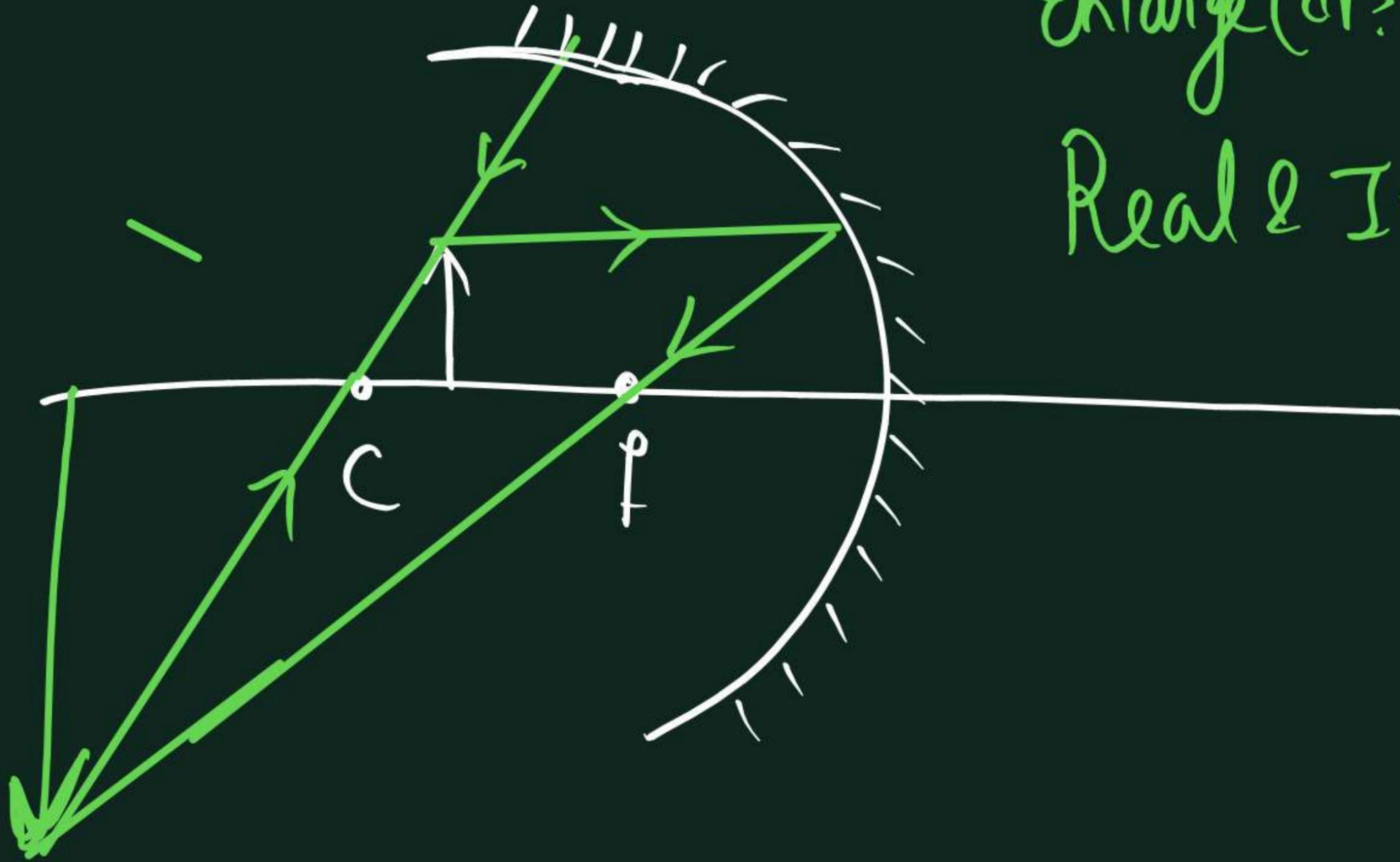
Image - C  
↳ Same Size  
↳ Real & Inverted

④ वस्तु (C-F)

Image = Behind (C)

Enlarge (वस्तु)

Real & Inverted



5) at F

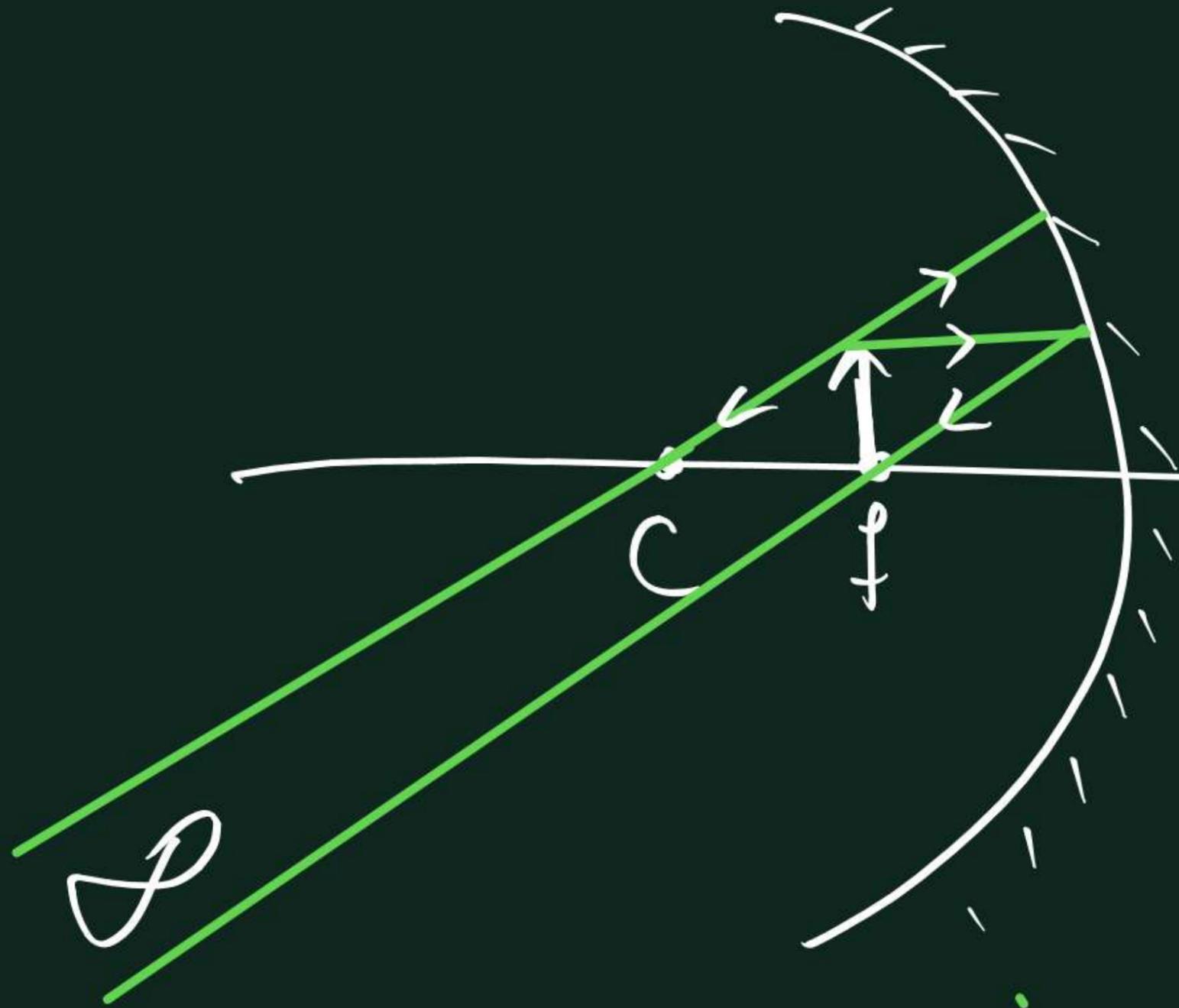


Image  $\infty$

बहुत दूर

Highly Enlarge

Real & Inverted

⑥ Between (F-P)  
 (f-p के बीच में)

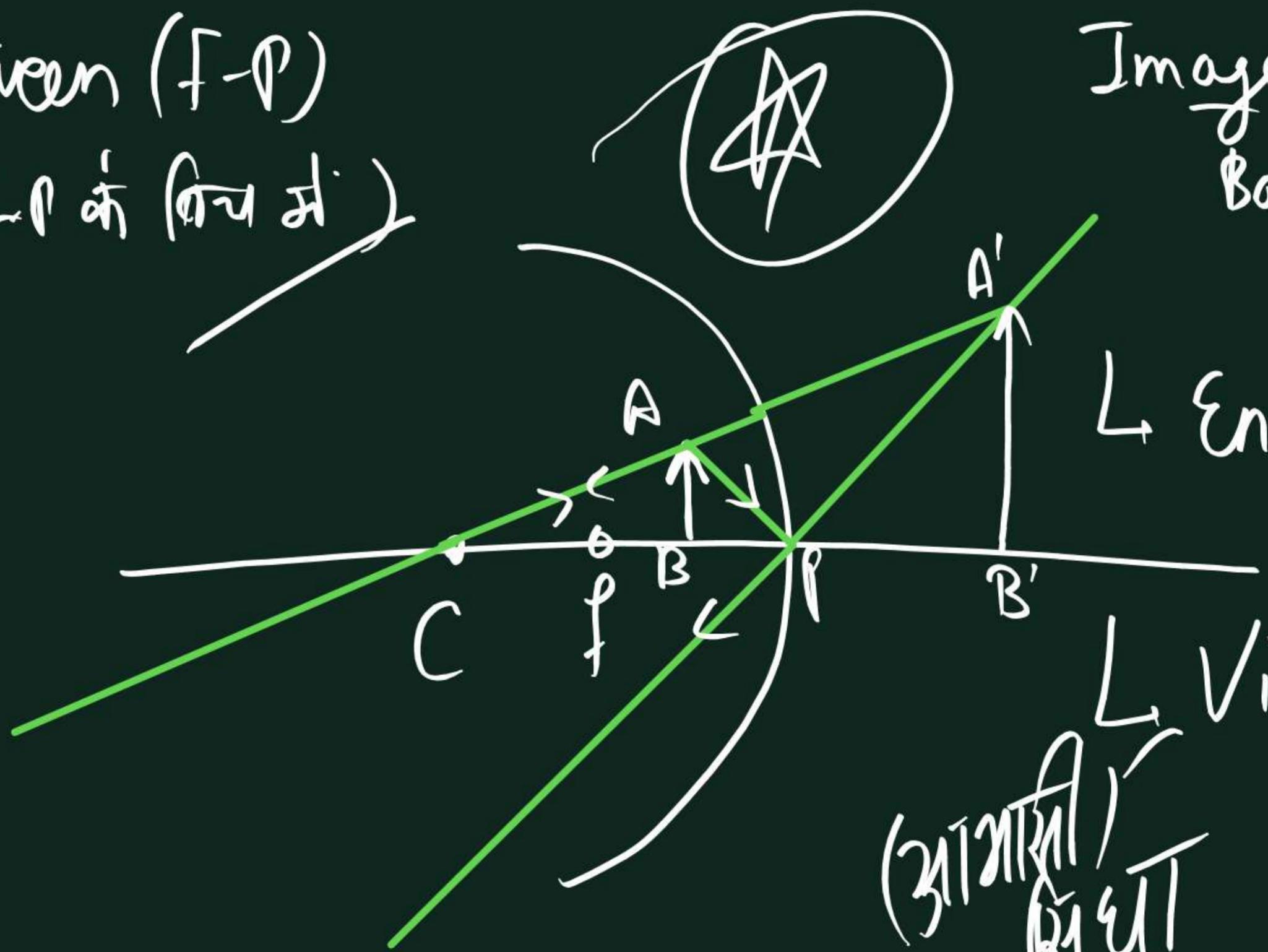
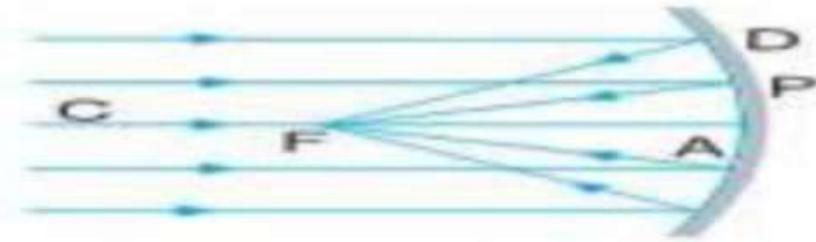


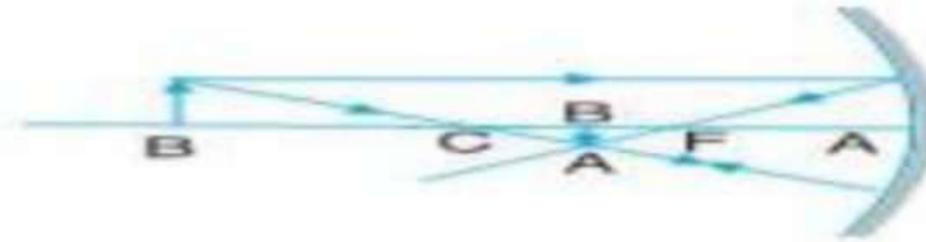
Image  
 Back of Mirror  
 (पीछे)  
 ↳ Enlarge (बड़ा)

↳ Virtual & erect  
 (आभासी)  
 (उभय)



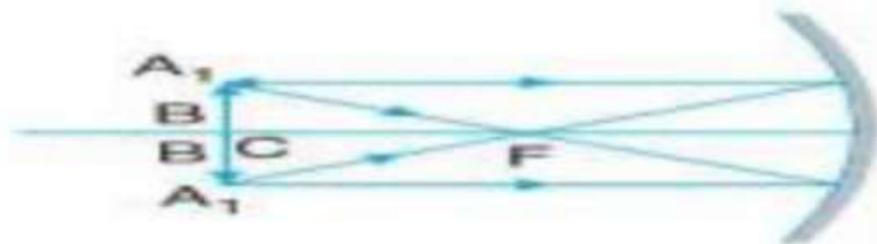
Real, inverted, highly diminished image at focus

(a) When the object is situated at  $\infty$



Real, inverted, diminished between C and F

(b) Object beyond C



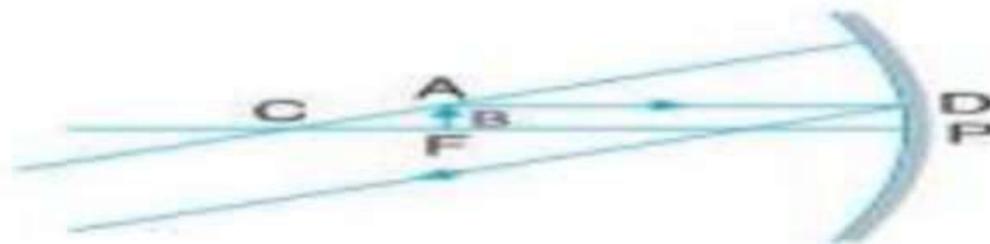
Real, inverted image of the same size as object at C

(c) Object at C



Real, inverted, enlarged image beyond C

(d) Object between C and F



Real, inverted, highly enlarged image at infinity

(e) Object at F



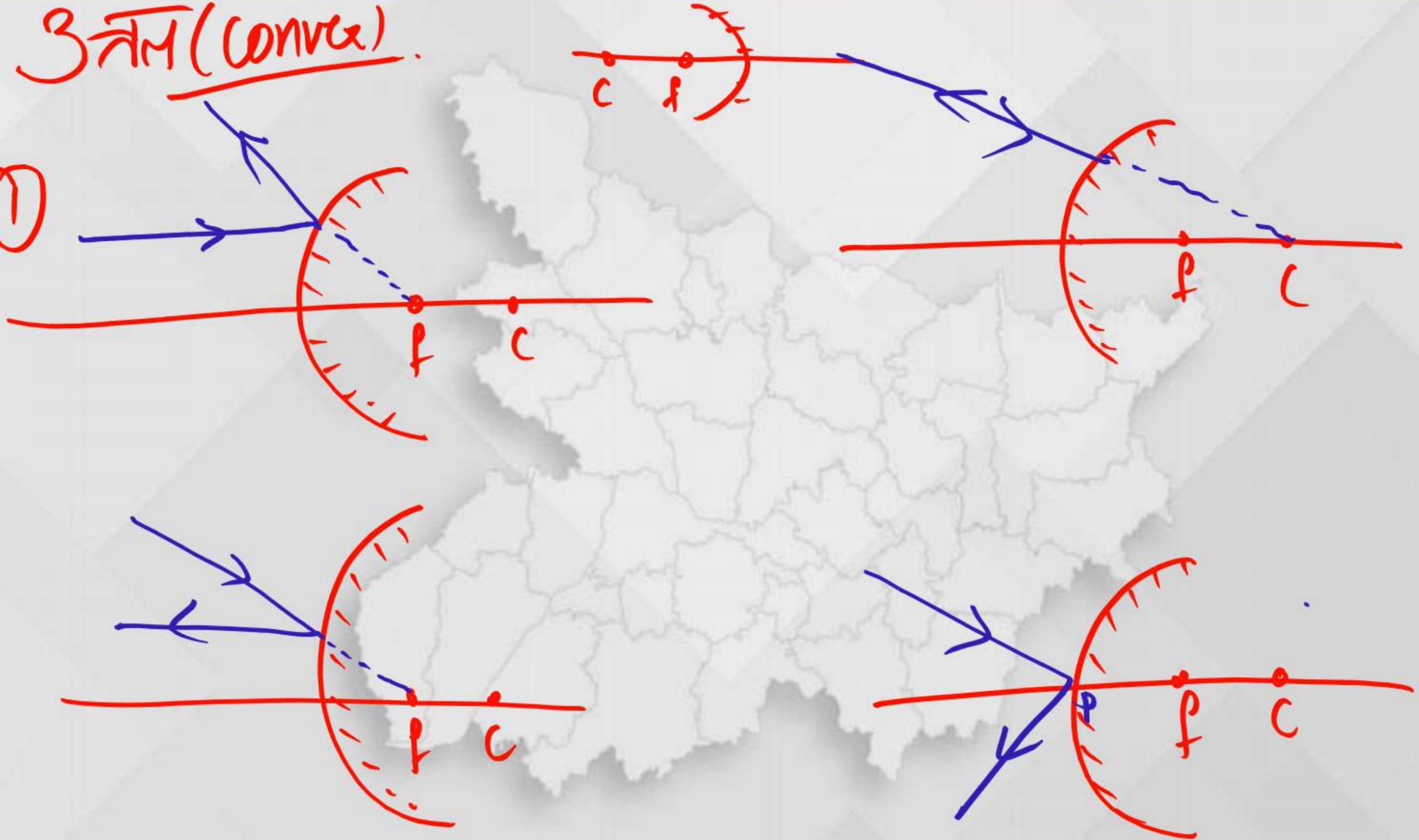
Virtual, erect, enlarged image behind the mirror

(f) Object between F and P



3 प्रम (convex)

①



① वस्तु ( $\infty$ )

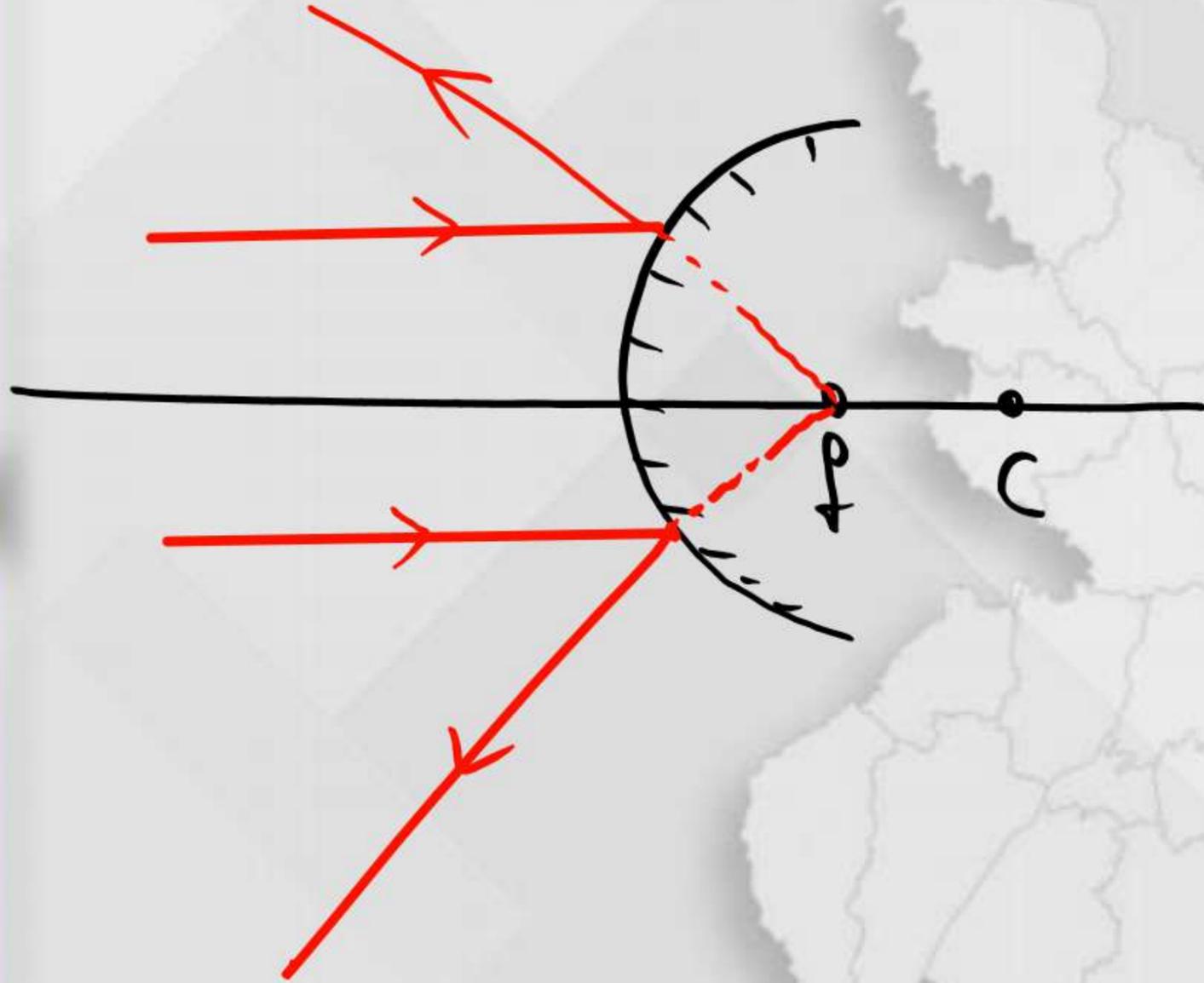


Image  $\rightarrow$   $f$

बहुत छोटा (Highly Diminished)

अमूर्त & सिधा

Virtual & Erect.

②

उत्तल दर्पण के आगे

In front of mirror

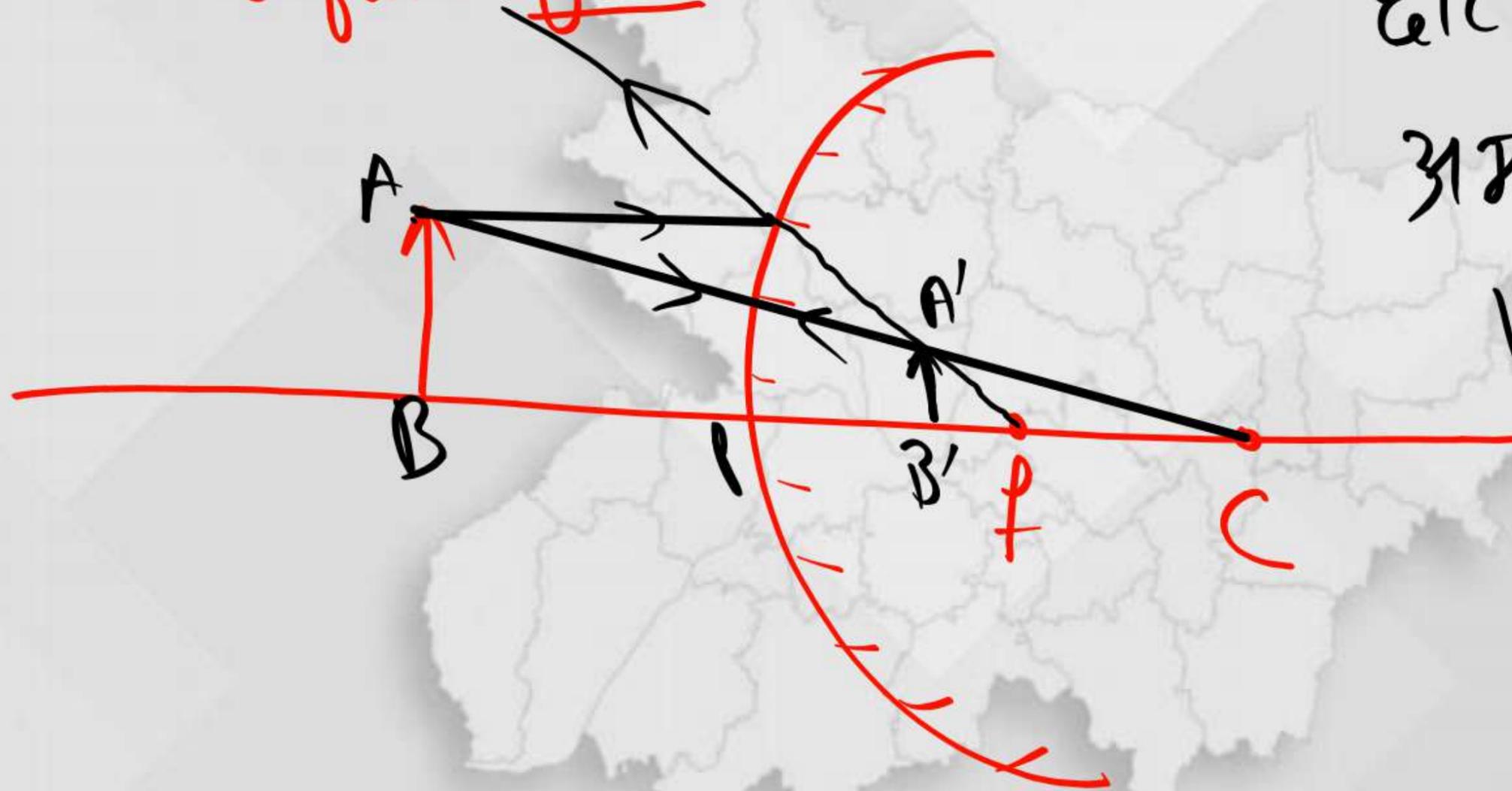


Image = (P-F)

ए।ट। (Diminished)

अमाली कृत

Virtual &amp; erect

(दफा)

$$\frac{1}{v} + \frac{1}{u} = \frac{1}{f}$$

↓  
विषय

↓  
दूर

↓  
फोकस

$$m = -\frac{v}{u} = \frac{h'}{h}$$

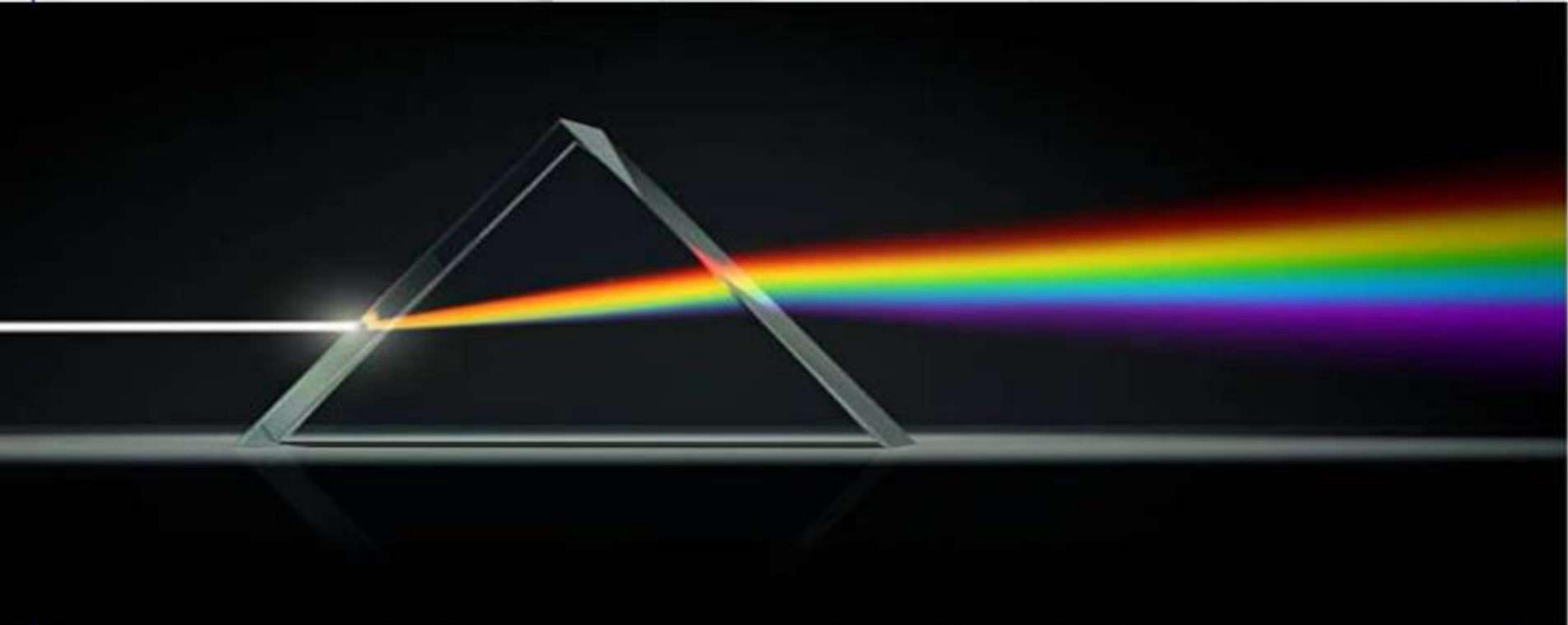
$$\frac{1}{v} = \frac{1}{f} - \frac{1}{u}$$

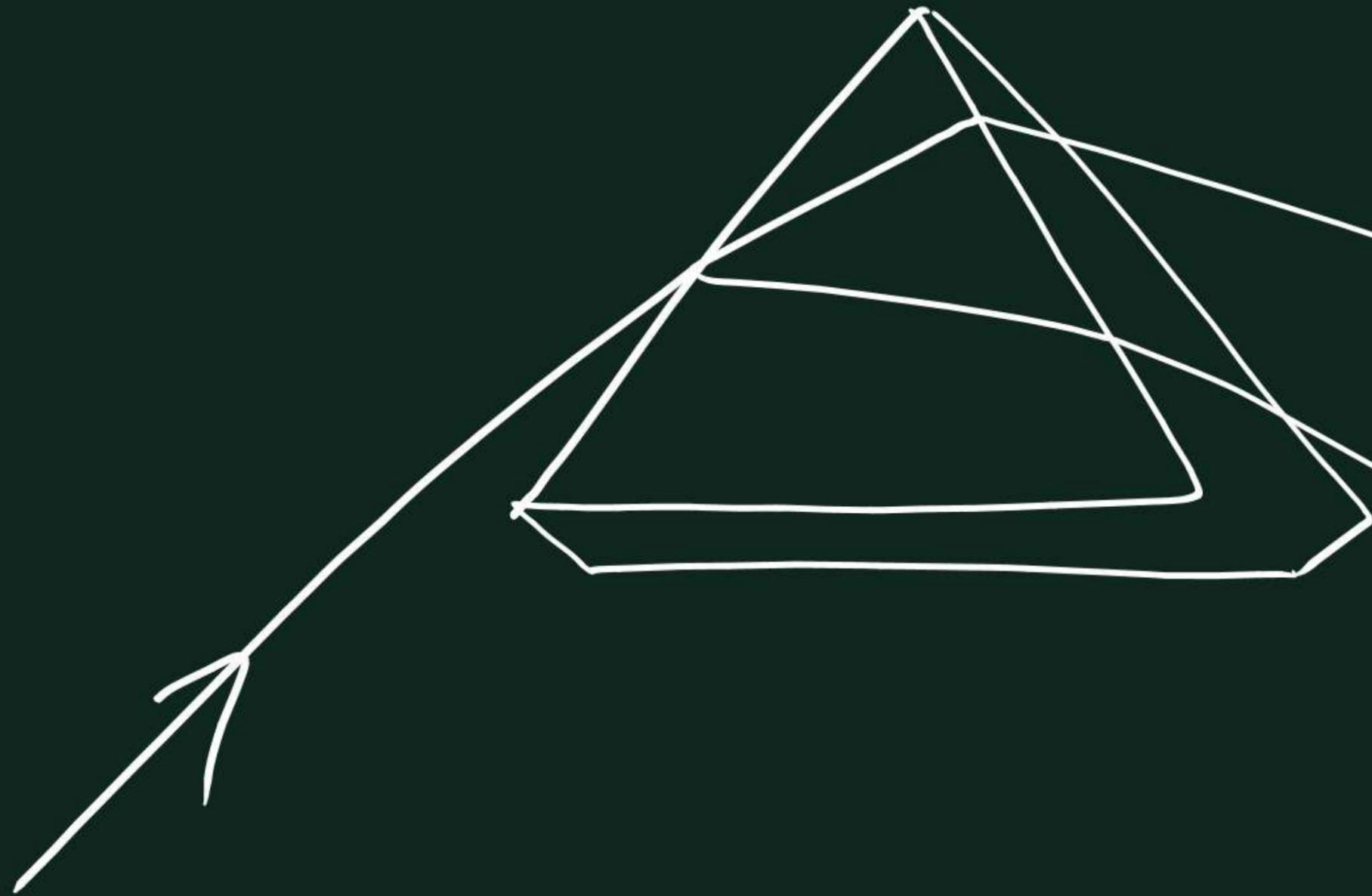
2004 - 2020-22

BPSG

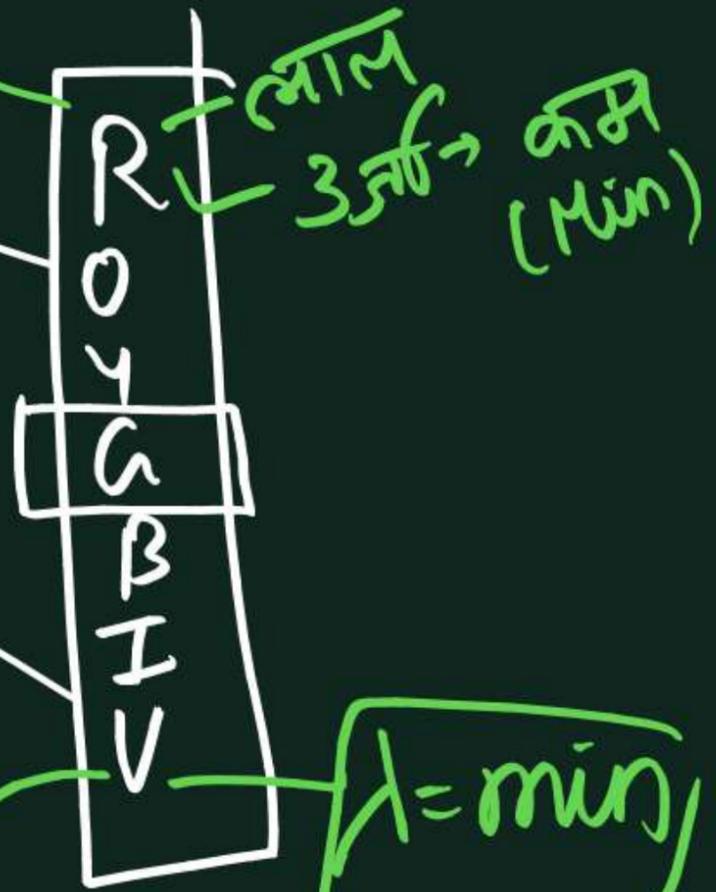
250-Science

प्रकाश का वर्ण-विक्षेपण (Dispersion of light)



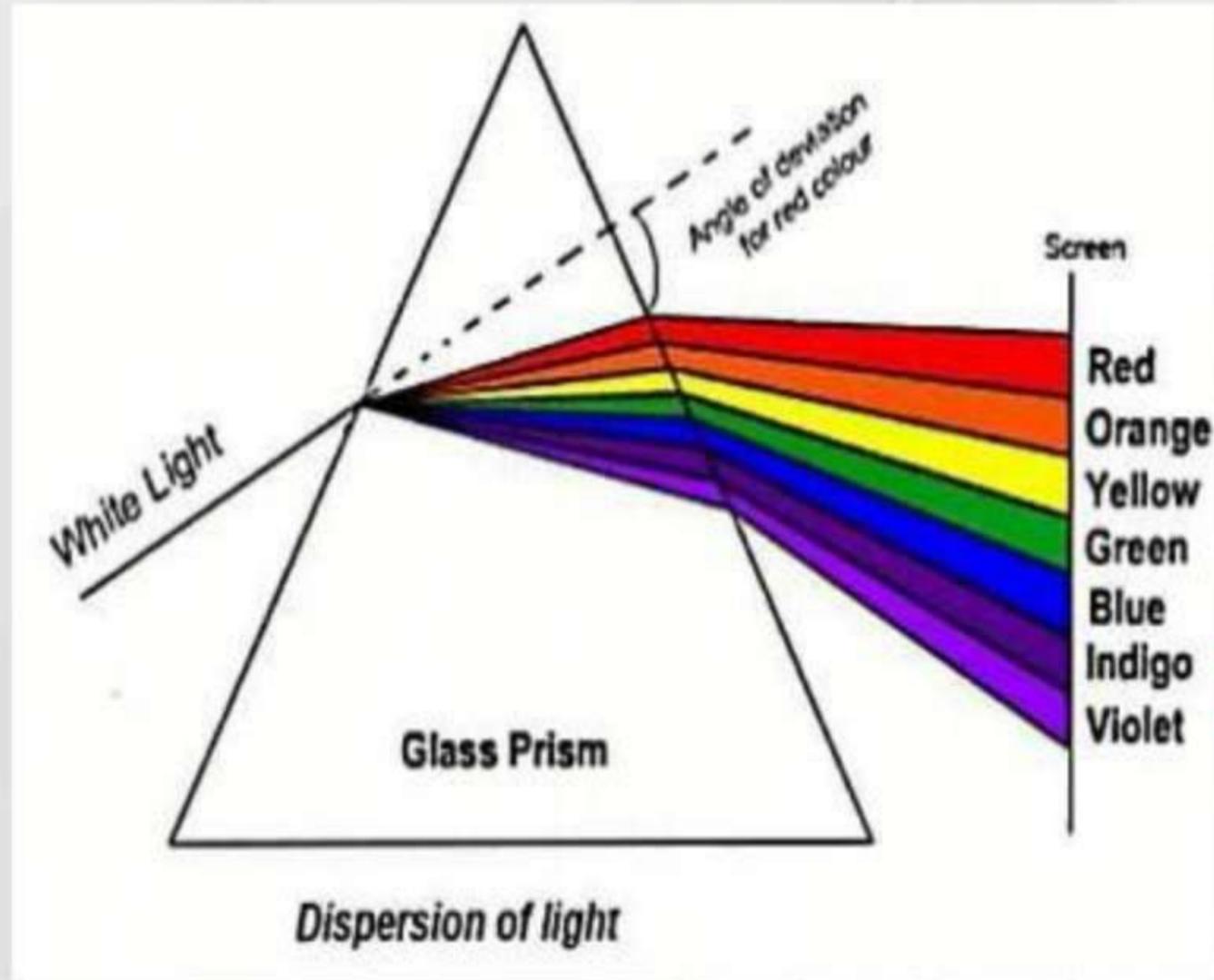


$n = \max(\text{निम्न दृश्य})$   
Wavelength



उच्च  
अधिक  
Max

$\lambda = \min$



Rainbow.

<u>Primary</u>	<u>Secondary</u>
Red	
Orange	
Yellow	
Green	
Blue	
Indigo	
Violet	

Red

Violet

R



