

Made with **KINEMASTER**

Focus Spot

**Students find difficulty in constructing
triangles because of its two
different cases**

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**Dear Students, Let's see
how much easy they are**

Draw a triangle of sides 4cm, 5cm and 6 cm and then construct another triangle whose sides are $\frac{2}{3}$ of the corresponding sides of this triangle

&

Draw a triangle of sides 4cm, 5cm and 6 cm and then construct another triangle whose sides are $\frac{3}{2}$ of the corresponding sides of this triangle

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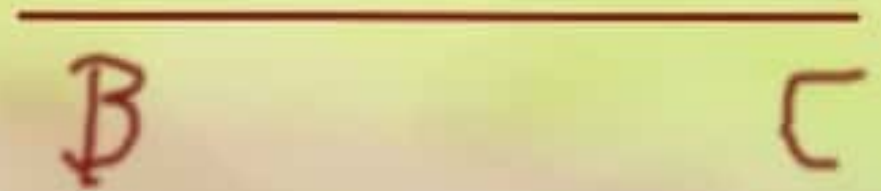
Same Steps

**Draw a line segment BC
of length 6 cm**

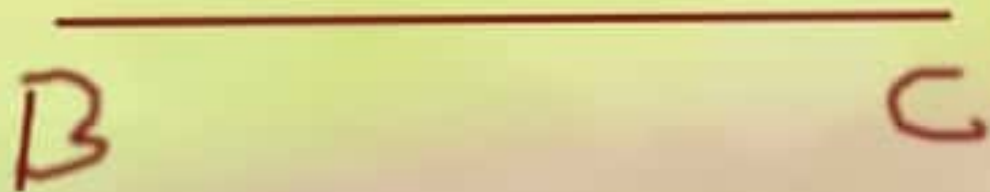


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**Draw a line segment BC
of length 6 cm**

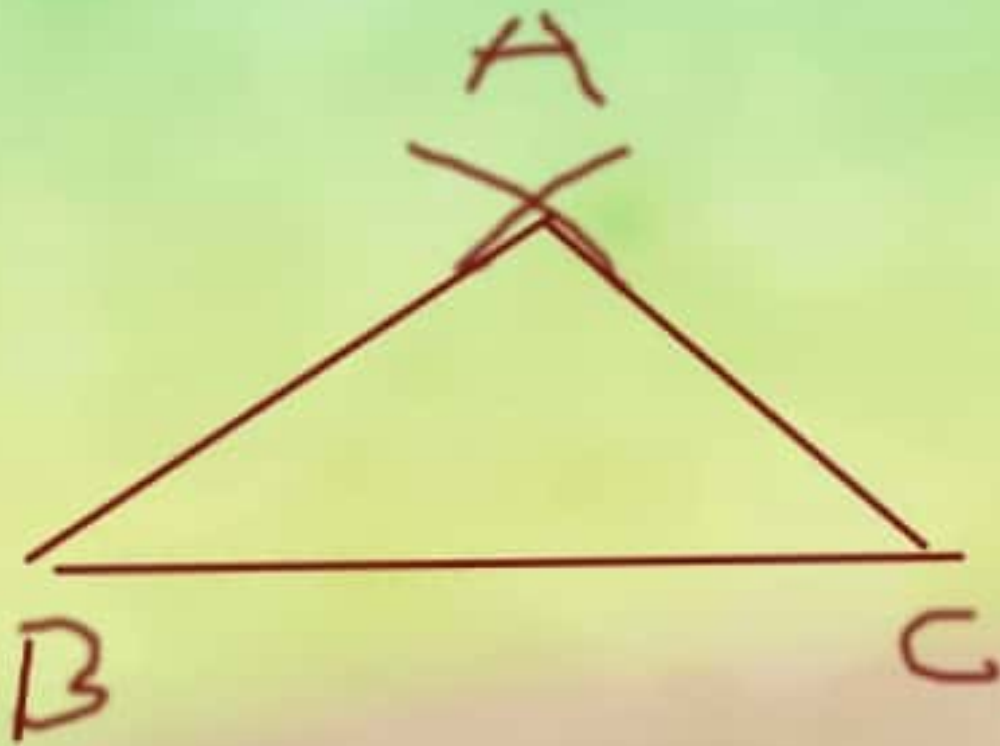


Draw an arc of 5 cm from B



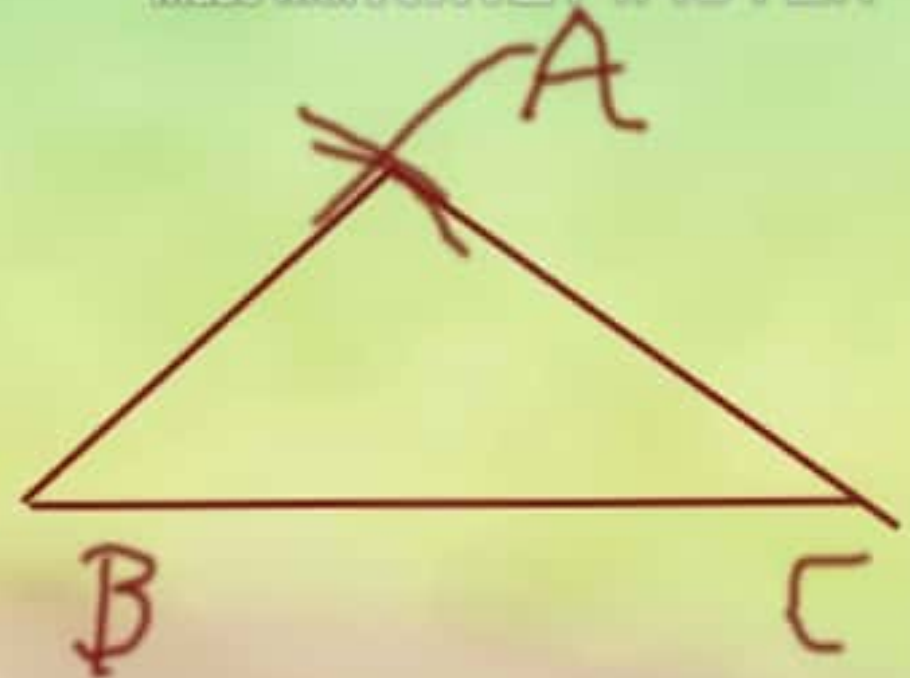
Draw an arc of 5 cm from B





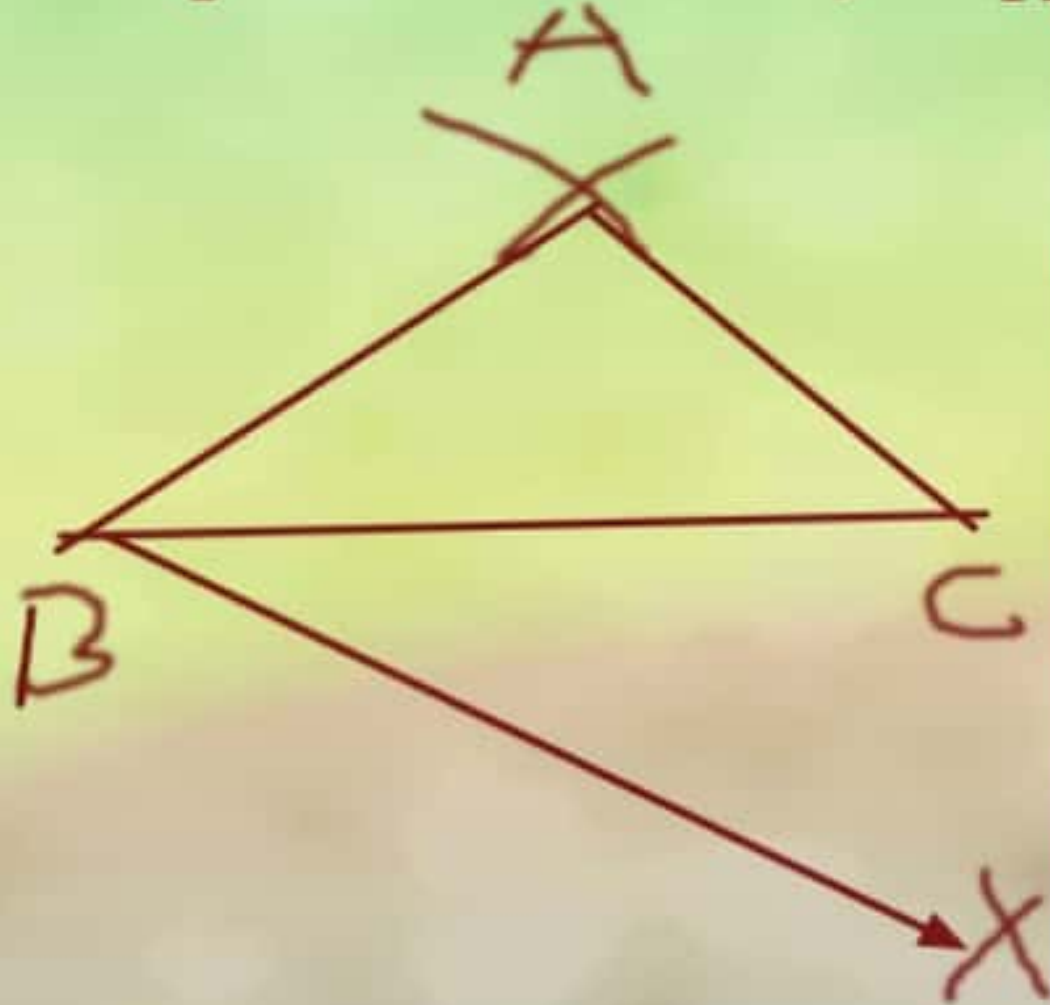
Draw an arc of 4 cm from C such that it intersects the previous arc. Let it be A

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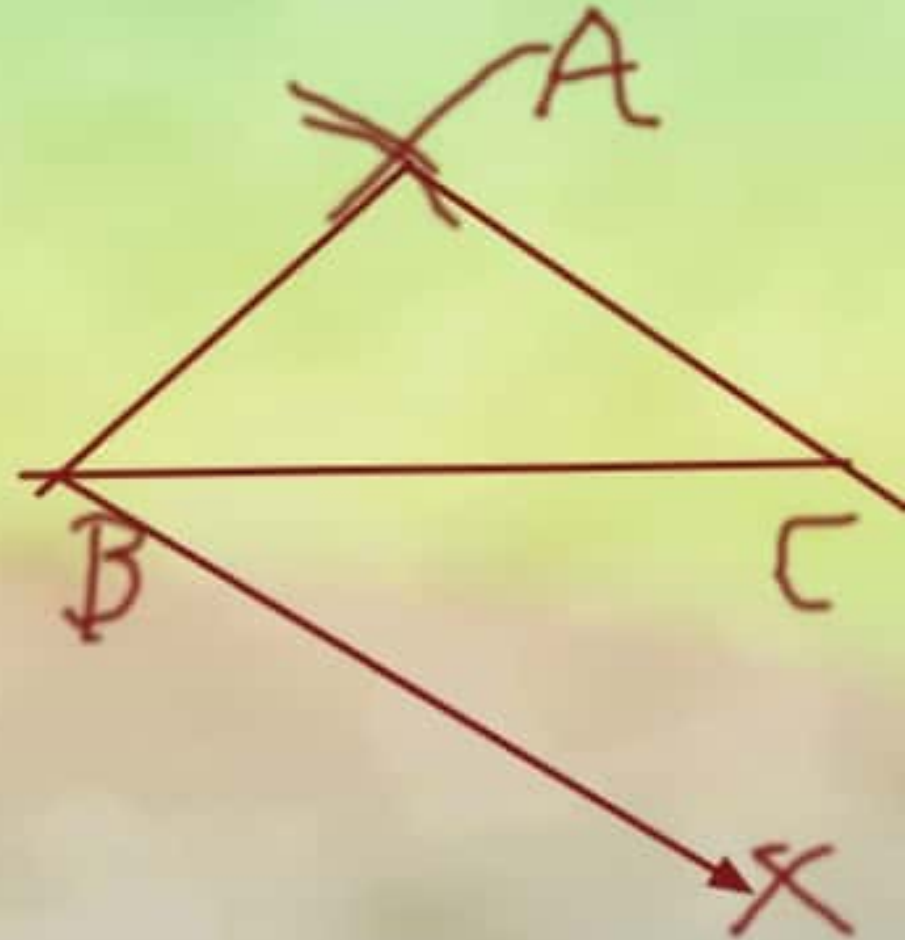


Draw an arc of 4 cm from C such that it intersects the previous arc. Let it be A

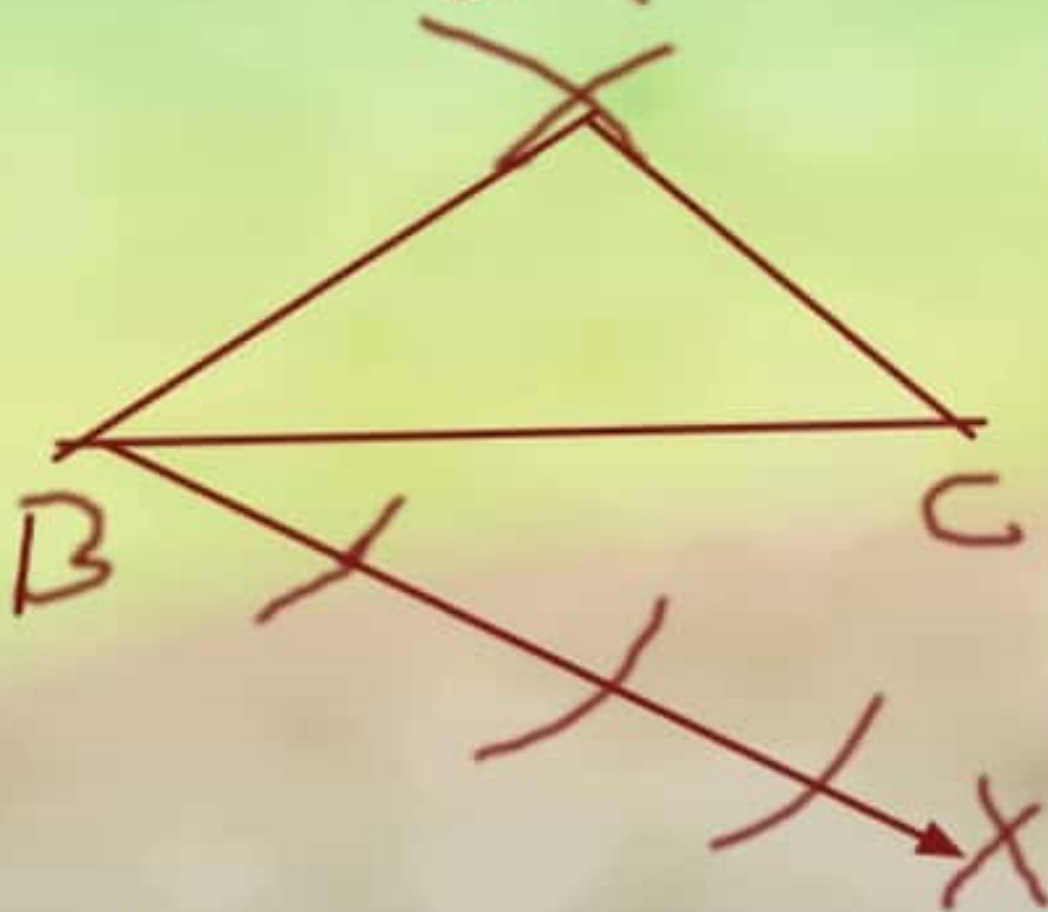
From point B, make a ray BX



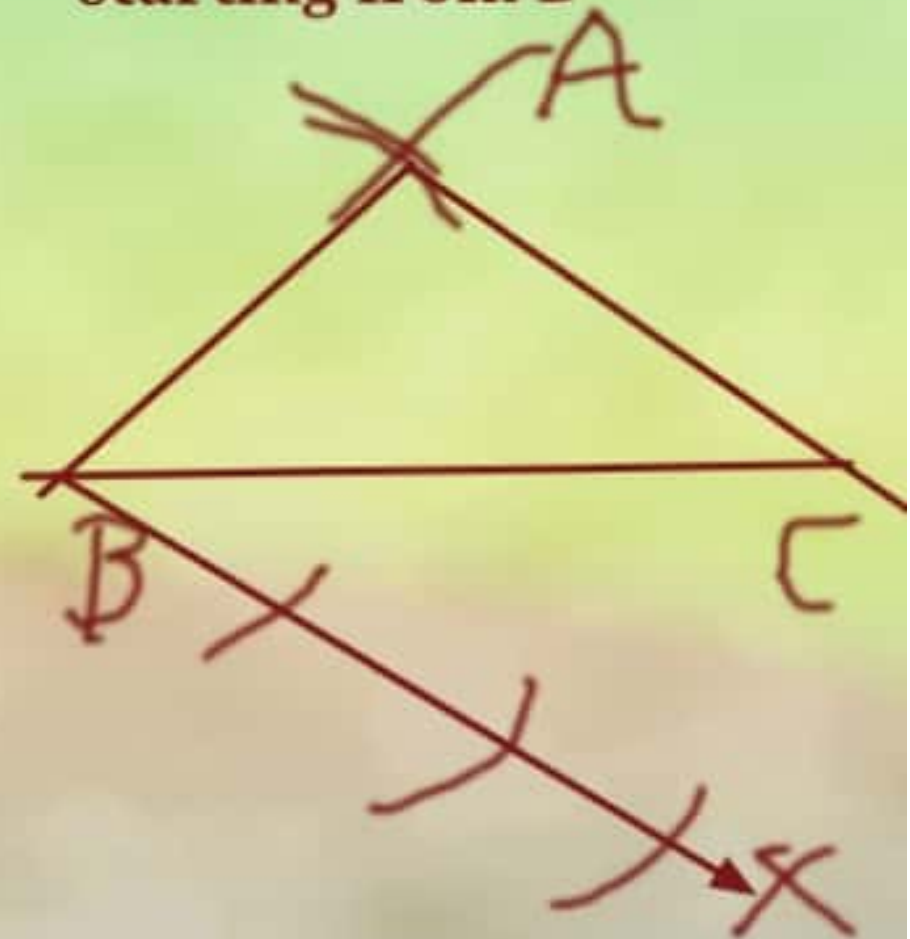
From point B, Make a ray BX



Make 3 equal arcs
starting from B



Make 3 equal arcs
starting from B



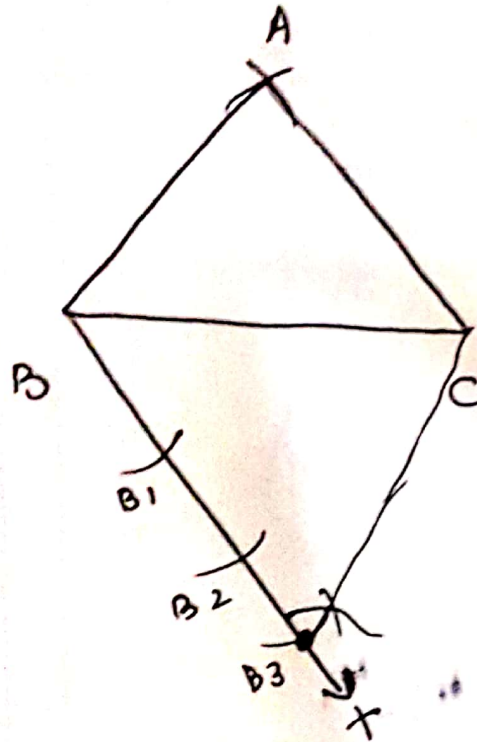
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Different Steps from here

Num < Denominator

Scale factor

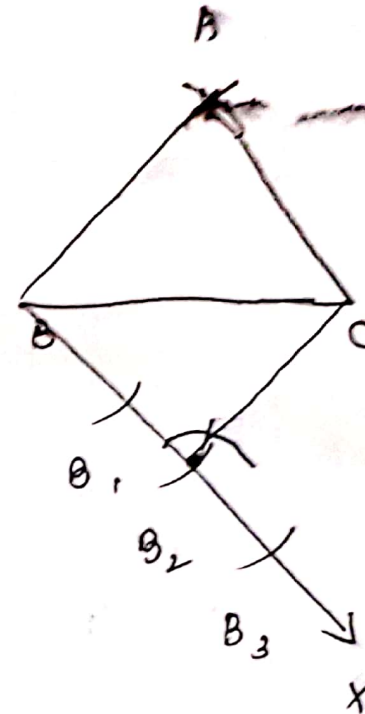
$$\frac{2}{3}$$



Num > Denominator

Scale factor

$$\frac{3}{2}$$



→ Important

arc at denominator
Always a ~~construction~~ to be
made & joined with C

Num < Den

**Repeat the same
procedure (as done
at B3)
at B2 and hence at C**

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Num > Den

**Repeat the same procedure
at B3 (as done at B2) and then
draw a line parallel to B2C
such that the line meets extended
BC at C'**

&

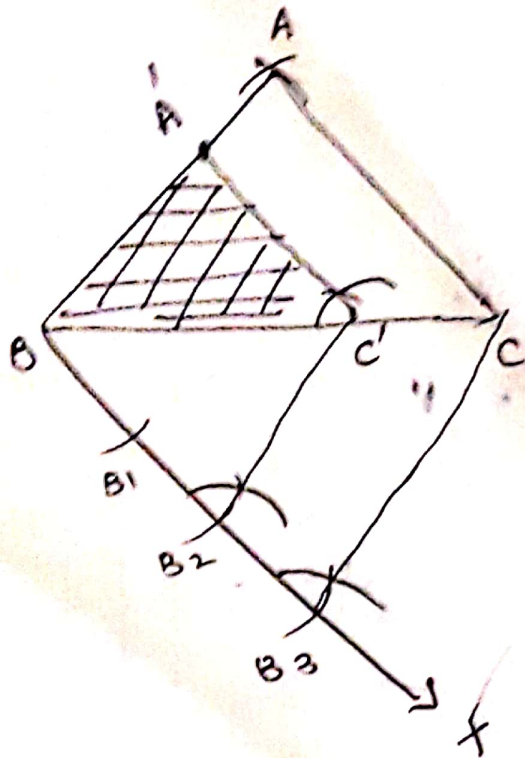
**Repeat the same procedure at C'
such that the line drawn meets
the extended BA at A'**

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**Finally you will get $\Delta A'BC'$ in
both the cases**

(when $\angle < 90^\circ$)

Scale factor $\frac{2}{3}$

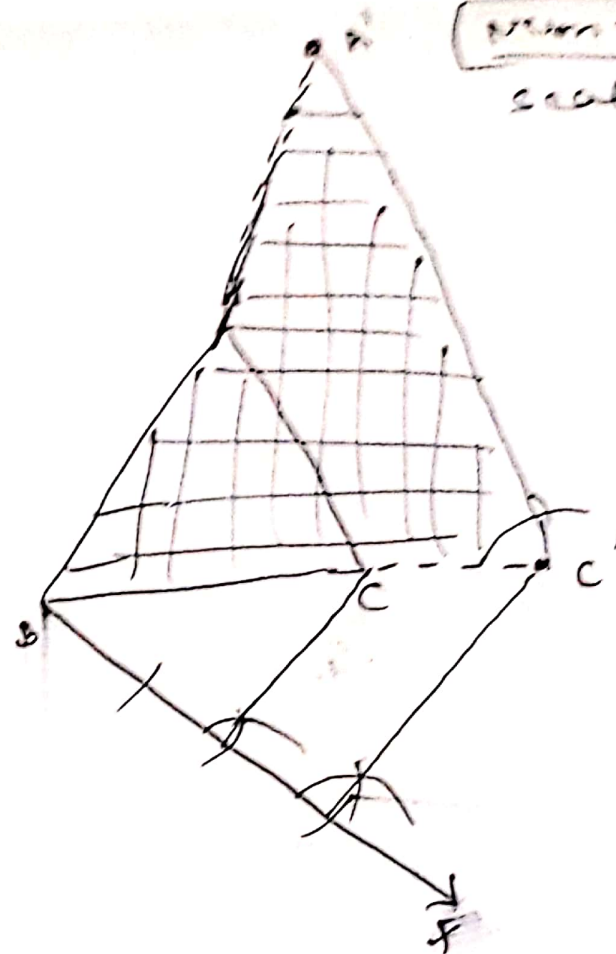


$A'B'C'$ is constructed triangle which is smaller than ABC

(when $\angle > 90^\circ$)

Scale factor

$\frac{3}{2}$



$A'B'C'$ is constructed triangle which is bigger than ABC

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Thank u