



Proof

$$\angle AA_3P = \angle AA_8B$$

$$\angle XAY = \angle XAY$$

$\therefore \triangle AA_3P \sim \triangle AA_8B$
by AA Cor.

$$\therefore \frac{AA_3}{A_3A_8} = \frac{AP}{PB}$$

$$\frac{3}{5} = \frac{AP}{PB}$$

$$\Rightarrow AP:PB = 3:5$$

Steps

- ① draw $AB = 7\text{cm}$
- ② draw $\angle XAY$ and mark 8 arcs with equal radii begin. at A to A_8
- ③ join A_8B and draw $A_3P \parallel A_8B$ intersect AB at P
- ④ $AP:PB = 3:5$

alternate Method available