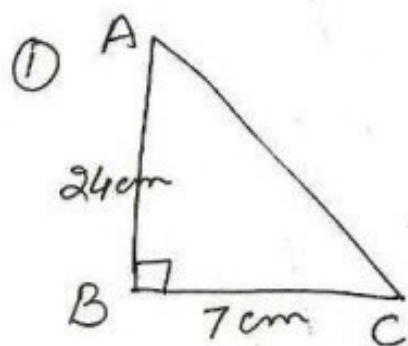


# NCERT Maths Solutions by Dev Anoop (Bathinda)



In rt  $\Delta ABC$   
 $AC^2 = AB^2 + BC^2$  (Pythagoras theorem)

$$= 24^2 + 7^2$$

$$= 576 + 49$$

$$= 625$$

$$AC = \sqrt{625}$$

$$= 25 \text{ cm}$$

$$\sin A = \frac{\text{o.s.}}{h}$$

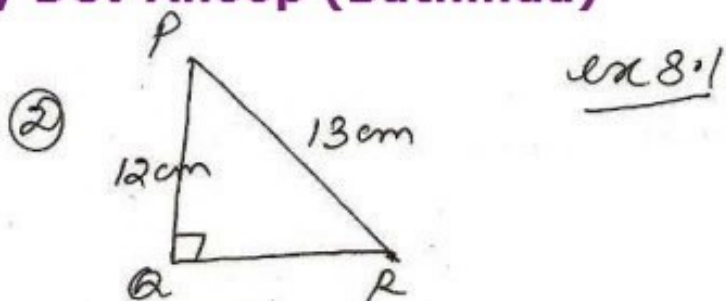
$$= \frac{7}{25}$$

$$\cos A = \frac{\text{a.s.}}{h}$$

$$= \frac{24}{25}$$

$$\sin C = \frac{24}{25}$$

$$\cos C = \frac{7}{25}$$



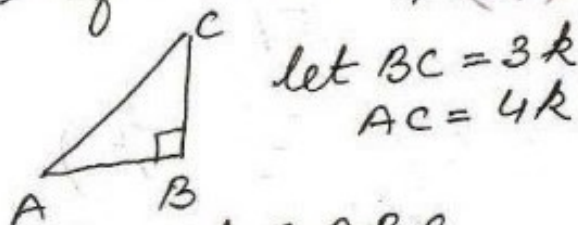
In rt  $\Delta POR$   
 $OR^2 = PR^2 - PO^2$  (pyth. th.)  
 $= 13^2 - 12^2$   
 $= 169 - 144$   
 $= 25$   
 $\Rightarrow OR = \sqrt{25}$   
 $= 5 \text{ cm}$

$$\tan P - \cot R$$

$$= \frac{5}{12} - \frac{5}{12}$$

$$= 0$$

③ If  $\sin A = \frac{3}{4}$  ( $\frac{\text{o.s.}}{h}$ )



In rt  $\Delta ABC$   
 $AC^2 = AB^2 + BC^2$  (py. th.)  
 $(4k)^2 = AB^2 + (3k)^2$

$$\Rightarrow AB^2 = 16k^2 - 9k^2$$

$$= 7k^2$$

$$\Rightarrow AB = \sqrt{7}k$$

$$\cos A = \frac{\sqrt{7}k}{4k}$$

$$\tan A = \frac{3k}{\sqrt{7}k}$$