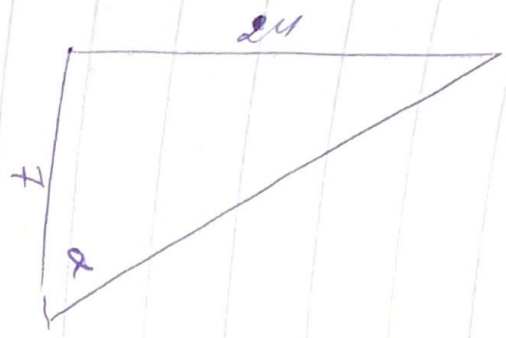


1.



Height of  $\sin^2 = 24^2 + 7^2 = 25^2$

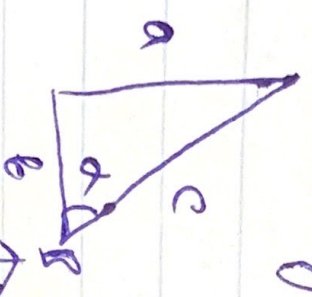
$$\begin{aligned} \cos \alpha &= \frac{7}{25} \\ \sin \alpha &= \frac{24}{25} \\ \tan \alpha &= \frac{24}{7} \\ \cot \alpha &= \frac{7}{24} \end{aligned}$$

$$2. \text{ a) } 1 - (1 - \cos \alpha)(1 + \cos \alpha) = 1 - 1 + \cos^2 \alpha = \cos^2 \alpha$$

b)  $\tan \alpha \cdot \cos \alpha + \sin \alpha =$

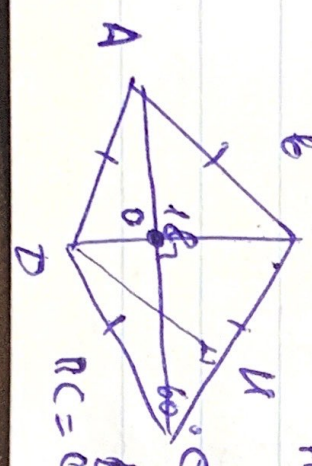
que gaurao then!

$$= \frac{a}{b} \cdot \frac{b}{c} + \frac{a}{c} = 2 \frac{a}{c} = 2 \cdot \sin \alpha$$



$AO = OC = g$   
 $EO - bucoo$   $fu bucoo$   $houuroo$   $\wedge$   $ROE$

3.



$AO = OC = g$   
 $EO - bucoo$   $fu bucoo$   $houuroo$   $\wedge$   $ROE$   
 $RC = CD = RD \Rightarrow \sin 60^\circ = \frac{g}{2} = \frac{g}{\sqrt{3}} = \frac{CO}{8} = \frac{18}{\sqrt{8}} = 8\sqrt{3}$

$$P_{AKCB} = 4 \cdot 6\sqrt{3} = 24\sqrt{3}$$

$$S_{AKCD} = 9 \cdot 6\sqrt{3} = 54\sqrt{3}$$