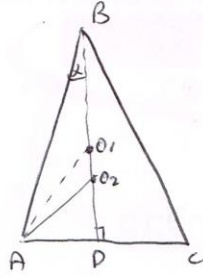


2.87  
6



כדי שכל הנקודות ייבנו על BD  
היי אולי צריך משהו אחר

$$\angle ABD = \alpha \quad (1)$$

עוד  $\triangle ABO_1 \rightarrow \angle BAO_1 = \alpha$

KA מולל צינן  $AO_2$

$$\angle A = 90 - \alpha$$

$$\angle O_2AD = 45 - \frac{\alpha}{2}$$

$$\angle O_1AO_2 = \angle A - \angle BAO_1 - \angle O_2AD = 90 - \alpha - \alpha - (45 - \frac{\alpha}{2}) = 45 - 1.5\alpha$$

$$\cos \alpha = \frac{BD}{AB} \Rightarrow AB = \frac{BD}{\cos \alpha} = \frac{h}{\cos \alpha} \quad (2)$$

$\triangle ABC$ :  $\frac{AB}{\sin \angle C} = 2R \Rightarrow \frac{h}{2 \cos^2 \alpha} = R$

$$R = AO_1$$

$\triangle AO_1O_2$ :  $\frac{AO_1}{\sin(\angle AO_2O_1)} = \frac{O_1O_2}{\sin(\angle O_1AO_2)} \Rightarrow O_1O_2 = \frac{R \cdot \sin(45 - \frac{\alpha}{2})}{\sin(185 - \frac{\alpha}{2})}$

$$O_1O_2 = \frac{h}{2 \cos^2 \alpha} \cdot \frac{\sin(\frac{45}{2} - \frac{\alpha}{2})}{\sin(\frac{315}{2} - \frac{\alpha}{2})} = \frac{h}{2 \cos^2 \alpha} \cdot \frac{\cos(\frac{32}{2} + \frac{\alpha}{2})}{\cos(\frac{\alpha}{2} - \frac{4}{2})}$$