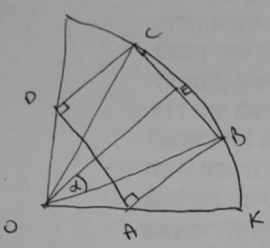
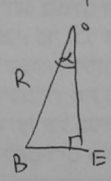


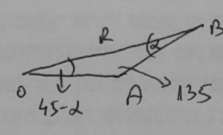
2.39  
5  
10



גיאון OBK זכרון  
(7 זוויות) וזוהי " " OAD  
 $\angle BOA = 45^\circ - \alpha \leftarrow \angle EOK = 45^\circ$  פס



$BE = R \sin \alpha$   
 $CB = 2BE = 2R \sin \alpha$



$\triangle OAB$  ? פוליון זכרון  
 $\frac{R}{\sin 135} = \frac{AB}{\sin(45^\circ - \alpha)}$

$AB = \frac{R \sin(45^\circ - \alpha)}{\sin 135} = \frac{\frac{\sqrt{2}}{2} R (\cos \alpha - \sin \alpha)}{\frac{\sqrt{2}}{2}} = R(\cos \alpha - \sin \alpha)$

$S_{ABCD} = AB \cdot CB = 2R \sin \alpha \cdot R(\cos \alpha - \sin \alpha) = 2R^2 (\sin \alpha \cos \alpha - \sin^2 \alpha) = R^2 (\sin 2\alpha - 2\sin^2 \alpha) =$   
 $= R^2 (\sin 2\alpha + \cos 2\alpha - 1)$

$S' = R^2 (2 \cos 2\alpha - 2 \sin 2\alpha) = 0 \rightarrow \tan 2\alpha = 1 \rightarrow 2\alpha = \frac{\pi}{4} + \frac{\pi}{2}k$   
 $\alpha = \frac{\pi}{8} + \frac{\pi}{4}k$   
 $S(\frac{\pi}{8}) = R^2 (\frac{\sqrt{2}}{2} + \frac{\sqrt{2}}{2} - 1) = R^2 (\sqrt{2} - 1)$  max

זכרון זכרון זכרון (2)