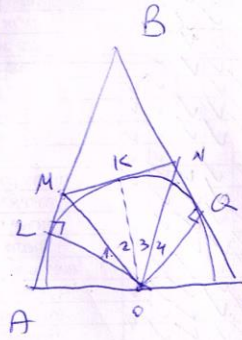


1.55  
3



$\angle L + \angle Q = 180^\circ$

(1)

לכל 2 אבול נהיה  $\angle BQO$   
 (הגודל המשותף הוא  $180^\circ$  והוא 134)

$\angle C = \angle A = \alpha$  (מש)

(2)

$\angle QOC = \angle AOL = 90 - \alpha$

$180 = \angle AOL + \angle O_1 + \angle O_2 + \angle O_3 + \angle O_4 + \angle QOC$

$180 = 90 - \alpha + \angle O_1 + \angle O_2 + \angle O_3 + \angle O_4 + 90 - \alpha$

$2\alpha = \angle O_1 + \angle O_2 + \angle O_3 + \angle O_4$

(הנה  $\angle M$  ו- $\angle N$  הן זוויות 21 ו-22) (מש 1)  $\angle NQO$  !  $\angle MKO$

$\angle O_3 = \angle O_4, \angle O_1 = \angle O_2$  (מש)

$2\alpha = 2\angle O_2 + 2\angle O_3$  /:2

$\alpha = \angle O_2 + \angle O_3$

$\alpha = \angle MON$

(מש)  $\angle A = \angle C$

(3)

(5.5)  $\triangle AMO \sim \triangle CON$

$\frac{AO}{NC} = \frac{AM}{OC}$   
 $AO \cdot OC = AM \cdot NC$   
 $\frac{AC}{2} \cdot \frac{AC}{2} = AM \cdot NC$

$\angle O_3 = \angle O_4 = 90 - \beta$  (מש)  $\beta = \angle ONQ$

$\angle O_2 = \angle O_1 = \alpha - (90 - \beta) = \alpha + \beta - 90$

$\angle AOM = \angle AOL + \angle O_1 = 90 - \alpha + \alpha + \beta - 90 = \beta$

(5.3.3)  $\triangle OQC \cong \triangle OLA$

$\frac{1}{2}AC = AO = OC$  (מש)