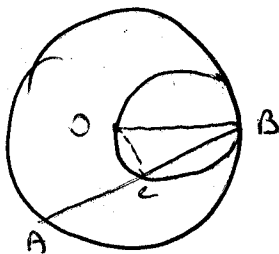
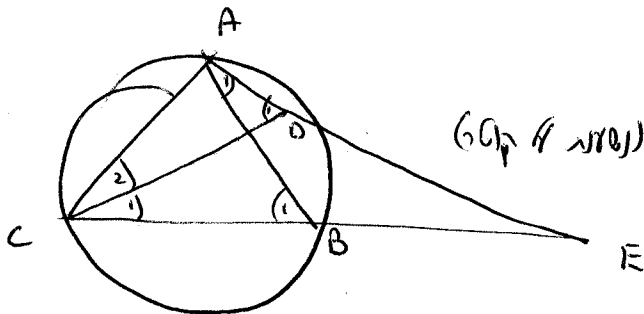


31



(OB מקוטר  $\angle$  נגד)  $\angle OCB = 90^\circ$  ∴  
 (הצדדים הנגדיים)  $\angle OCB = \angle OCA$  ∴  
 הנקודה C היא תחילתו של  $AB$   
 $\Downarrow$   
 $AC = CB$

33



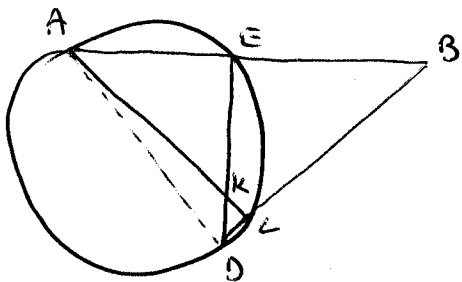
( $\Delta ABE$  -  $\Delta$  שווה)  $\angle A_1 = \angle E = \alpha$  ∴  
 ( $\Delta ABE$  -  $\Delta$  שווה)  $\angle B_1 = 2\alpha$   
 (60°  $\angle$  נגד)  $\angle CAB = 90^\circ \Rightarrow \angle C = 180 - 90 - 2\alpha$   
 (מש)  $\angle C_1 = \angle C_2$   
 $\angle C_1 = \frac{180 - 90 - 2\alpha}{2} = \frac{90 - 2\alpha}{2} = 45 - \alpha$

$\angle C_1 + \angle A_1 = 45 - \alpha + \alpha = 45$

( $\Delta CDE$  -  $\Delta$  שווה)  $\angle D_1 = \angle E + \angle C_1$  ∴

$\angle D_1 = \alpha + 45 - \alpha = 45$

36



( $\Delta ACD$   $\Delta$  שווה)  $\angle ACD = \angle AED$  ∴  
 (מש) ( $\Delta AKE$   $\Delta$  שווה)  $\angle AKE = \angle CKD$

$\Downarrow$   
 ( $\Delta KDC$ )  $\angle EDC = 180^\circ - \angle ACD - \angle CKD$

( $\Delta AKE$ )  $\angle EAK = 180^\circ - \angle AED - \angle AKE$

$\Downarrow$   
 (\*)  $\angle EDC = \angle EAK$

(מש)  $AC = CB$

$\Downarrow$   
 $\angle EAK = \angle B$

$\Downarrow$   
 $EB = ED \Leftarrow \angle EDC = \angle B$

( $180^\circ - \Delta$  משולש)  $\angle KDC = 180 - \angle AKE = 45$  ∴

( $\Delta ABC$   $\Delta$  שווה)  $\angle KCD = \angle CAB + \angle ABC = 2\angle ABC$  ∴

( $\Delta KDC$ )  $\angle KDC = \angle ABC$  ∴

$\angle D + \angle K + \angle C = 180$

$45 + 2\angle ABC + \angle ABC = 180$

$3\angle ABC = 135 \Rightarrow \angle ABC = 45$

$\Downarrow$   
 $\angle C = 90$

$\Downarrow$   
 מקוטר AD