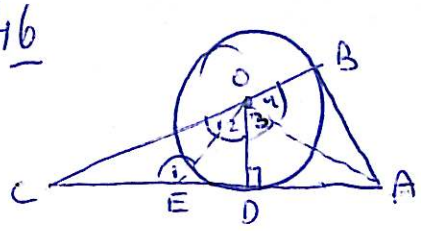
46



(נתון) $\angle O_1 = \angle O_2$, (נתון) $\angle A_1 = \angle A_2$ (א)

(ז.ז.ז) $\triangle ADO \cong \triangle ABO$

$\Downarrow$

$\angle O_3 = \angle O_4$

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

$180 = 2\angle O_2 + 2\angle O_3$

$90 = \angle O_2 + \angle O_3 = \angle EOA$

$\Downarrow$

(ז.ז) $\triangle EOA \sim \triangle OBA$

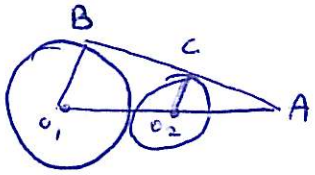
(זוויות מתאימות) $\angle OED = \angle BOA$

$\Downarrow$

(זוויות משלימות) $\angle CEO = \angle COA$ $\Rightarrow$ $\triangle COA \sim \triangle CEO$ (ז.ז) (ב)

$(180° - \delta$

50



$BO_1 \parallel CO_2$

$\Downarrow$

(משפט תאלס) $\frac{AO_2}{AO_1} = \frac{CO_2}{BO_1}$

(משיק) $\frac{6}{12} = \frac{r}{R}$

$R = 2r$

$6 = O_1O_2 = R + r = 2r + r = 3r$

$r = 2$, $R = 4$