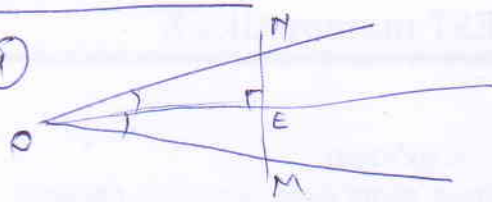


GRUPI C

①

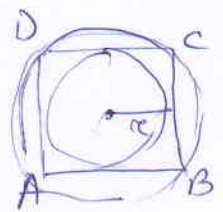


$\hat{NOE} = \hat{MOE}$
 $MN \perp OE$
 te vert.
 $ON = OM$

$\Delta OEM = \Delta OEN$
 OE e për bashkëit.
 $\hat{NOE} = \hat{MOE}$ nga kusht.
 $\hat{OEN} = \hat{OEM}$ kënd h drejta. $\Rightarrow ON = OM$

② Gje këndet e shtyrës të Δ të dytë' janë $a = 5x$ $b = 6x$ $c = 8x$
 brinjë me rrezë 8x me rrezë 5x $a - c = 6$ $8x - 5x = 6 \Rightarrow x = 2$
 $\Rightarrow a = 10$ $b = 12$ $c = 16$ cm.

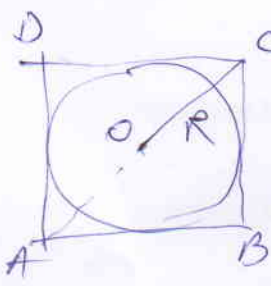
③



$AB = 8 \Rightarrow r = 4$

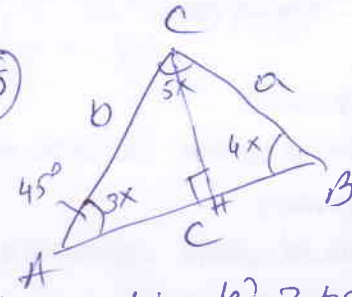
$AC = AB \cdot \sqrt{2} \Rightarrow AC = 8\sqrt{2} \Rightarrow R = \frac{AC}{2} = \frac{8\sqrt{2}}{2} = 4\sqrt{2}$

④



$R = 8$
 $AB = 16$
 $AC = 16\sqrt{2}$

⑤



$3x + 4x + 5x = 180$
 $12x = 180 \Rightarrow x = 15^\circ$
 $\alpha = 45^\circ$ $\beta = 60^\circ$ $\gamma = 75^\circ$

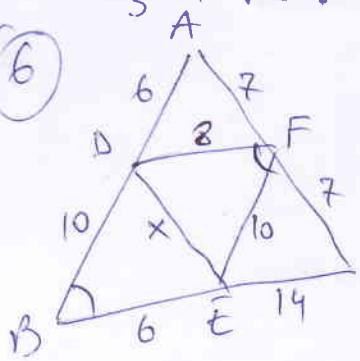
Juhet $a : b : c$
 i shprehim të 3 brinjët me vlerën e $CH = t$

$\hat{BCH} = 30^\circ \Rightarrow \frac{BC}{2} = \frac{a}{2} \Rightarrow a - \frac{a^2}{4} = t^2 \Rightarrow \frac{3a^2}{4} = t^2 \Rightarrow a^2 = \frac{4t^2}{3} \Rightarrow a = \frac{2t}{\sqrt{3}}$

$\Rightarrow BC = \frac{1}{2} \cdot \frac{2t}{\sqrt{3}} = \frac{t}{\sqrt{3}}$ $AC = CH = t$ $b = t\sqrt{2}$
 $AB = t\sqrt{2} + \frac{t}{\sqrt{3}} = t(\sqrt{2} + \frac{1}{\sqrt{3}})$

$a : b : c = \frac{2t}{\sqrt{3}} : t\sqrt{2} : t(\sqrt{2} + \frac{1}{\sqrt{3}}) = \frac{2\sqrt{3}}{3} : \sqrt{2} : \frac{\sqrt{6}+1}{\sqrt{3}} =$
 $= \frac{2\sqrt{3}}{3} : \sqrt{2} : \frac{3\sqrt{2}+\sqrt{3}}{3} = 2\sqrt{3} : 3\sqrt{2} : (3\sqrt{2}+\sqrt{3})$ ✓

⑥



$\Delta ABC \sim \Delta DEF$ sepër. $\hat{DFE} = \hat{ABC}$ dhe

$\frac{AB}{DF} = \frac{BC}{EF}$ $\frac{16}{8} = \frac{20}{10} = 2 \Rightarrow \frac{AC}{DE} = 2 \Rightarrow \frac{14}{x} = 2 \Rightarrow x = 7$

⑦ $X^4 - X^2 + 5X - 4$ me $X - 3$

3	1	0	-1	5	-4
	1	3	9	24	87
	1	3	8	29	83

$Q(x) = x^3 + 3x^2 + 8x + 29$ $r = 67$

$X^4 - X^2 + 5X - 4 = (X - 3)(X^3 + 3X^2 + 8X + 29) + 83$