

μ

μ

μ

1.) μ μ , μ μ μ

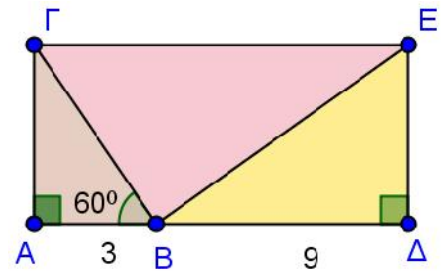
$$\varepsilon\varphi\omega = \frac{\eta\mu\omega}{\sigma\upsilon\nu\omega}$$

2.) μ μ , = 2 cm, 60° 30°
) μ μ , μμ

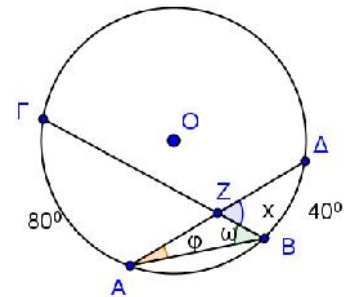
- i. Y μ ημω = 2,3
- ii. 0 < συνω < 1
- iii. ημ60° = συν30°
- iv. ημω < συνω
- v. εφ45° = $\frac{\sqrt{2}}{2}$

1.) $\frac{3(x-1)}{5} - \frac{5x-3}{10} + \frac{7}{10} = \frac{x}{5}$
) (λ - 2)x - 3x + 2λ = 4, μ μ

2.) μ , $\widehat{AB\Gamma} = 30^\circ$, = 3 cm = 9 cm.
) $A\Gamma = 3\sqrt{3}$ cm $B\Gamma = 6$ cm
) $BE = \sqrt{108}$ cm
) $\widehat{B\Delta E} = 30^\circ$.
) μ
) 72cm².



3.) μ $\widehat{A\Gamma} = 80^\circ$ $\widehat{B\Delta} = 40^\circ$.
 :
) $\hat{\varphi}$) $\hat{\omega}$) \hat{x}



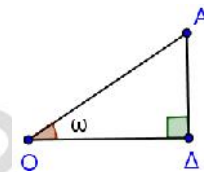
μ

1.)

)

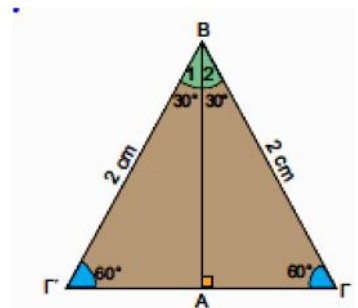
$$\eta\mu\omega = \frac{A\Delta}{OA}, \sigma\upsilon\nu\omega = \frac{O\Delta}{OA}, \epsilon\phi\omega = \frac{A\Delta}{O\Delta}.$$

$$\frac{\eta\mu\omega}{\sigma\upsilon\nu\omega} = \frac{\frac{A\Delta}{\cancel{OA}}}{\frac{O\Delta}{\cancel{OA}}} = \frac{A\Delta}{O\Delta} = \epsilon\phi\omega$$



2.)

, $\hat{B}_1 = \hat{B}_2 = 30^\circ$
 $= 2 \text{ cm}$, μ
 μ .
 60° , :
 $= 2 \text{ cm}$ A = $= 1 \text{ cm}$. $\eta\mu\hat{B}_2 = \eta\mu 30^\circ = \frac{A\Gamma}{B\Gamma} = \frac{1}{2}$
 μ : μ $\hat{B}_2 = 30^\circ$
 μ : μ :



$$AB^2 = B\Gamma^2 - A\Gamma^2 = 2^2 - 1^2 = 3, \quad AB = \sqrt{3}.$$

$$\mu \quad \sigma\upsilon\nu\hat{B}_2 = \sigma\upsilon\nu 30^\circ = \frac{AB}{B\Gamma} = \frac{\sqrt{3}}{2}.$$

$$\mu \quad \epsilon\phi\hat{B}_2 = \epsilon\phi 30^\circ = \frac{A\Gamma}{AB} = \frac{1}{\sqrt{3}} = \frac{1 \cdot \sqrt{3}}{(\sqrt{3})^2} = \frac{\sqrt{3}}{3}.$$

, μ μ μ μ μ μ , μ
 μ $\hat{\Gamma} = 60^\circ$.

$$\eta\mu\hat{\Gamma} = \eta\mu 60^\circ = \frac{AB}{B\Gamma} = \frac{\sqrt{3}}{2}, \quad \sigma\upsilon\nu\hat{\Gamma} = \sigma\upsilon\nu 60^\circ = \frac{A\Gamma}{B\Gamma} = \frac{1}{2}$$

$$\epsilon\phi\hat{\Gamma} = \epsilon\phi 60^\circ = \frac{AB}{A\Gamma} = \frac{\sqrt{3}}{1} = \sqrt{3}$$

) i. ii. iii. iv. v.

$$\begin{aligned}
 1.) \quad & \frac{3(x-1)}{5} - \frac{5x-3}{10} + \frac{7}{10} = \frac{x}{5} \\
 & \cancel{10}^2 \frac{3(x-1)}{\cancel{5}} - \cancel{10} \frac{5x-3}{\cancel{10}} + \cancel{10} \frac{7}{\cancel{10}} = \cancel{10}^2 \frac{x}{\cancel{5}} \\
 & 6(x-1) - (5x-3) + 7 = 2x \\
 & 6x - 6 - 5x + 3 + 7 = 2x \\
 & 6x - 5x - 2x = 6 - 3 - 7 \\
 & -x = -4 \\
 & x = 4
 \end{aligned}$$

$$) \quad (\lambda - 2)x - 3x + 2\lambda = 4 \quad x = 4 \quad :$$

$$\begin{aligned}
 & (\lambda - 2) \cdot 4 - 3 \cdot 4 + 2\lambda = 4 \\
 & 4\lambda - 8 - 12 + 2\lambda = 4 \\
 & 6\lambda = 8 + 12 + 4 \\
 & 6\lambda = 24 \\
 & \lambda = \frac{24}{6} = 4
 \end{aligned}$$

$$2.) \quad \varepsilon\varphi 60^\circ = \frac{A\Gamma}{AB} \quad \sqrt{3} = \frac{A\Gamma}{3} \quad A\Gamma = 3\sqrt{3}\text{cm}$$

$$) \quad \mu \quad \mu : \quad B\Gamma^2 = AB^2 + A\Gamma^2 = 3^2 + (3\sqrt{3})^2 = 9 + 27 = 36 \quad B\Gamma = 6\text{cm}$$

$$) \quad \mu \quad \mu : \quad BE^2 = B\Delta^2 + \Delta E^2 = 9^2 + (3\sqrt{3})^2 = 81 + 27 = 108 \quad BE = \sqrt{108} \text{ cm}$$

$$) \quad \varepsilon\varphi B\hat{\Delta}E = \frac{\Delta E}{B\Delta} = \frac{3\sqrt{3}}{9} = \frac{\sqrt{3}}{3} \quad B\hat{\Delta}E = 30^\circ$$

$$) \quad \mu \quad : E = (A\Delta) \cdot (A\Gamma) = 12 \cdot 6 = 72\text{cm}^2$$

$$3.) \quad \hat{\varphi} \quad \mu\mu \quad \hat{\varphi} = \frac{40^\circ}{2} = 20^\circ$$

$$) \quad \hat{\omega} \quad \mu\mu \quad \hat{\omega} = \frac{80^\circ}{2} = 40^\circ$$

$$) \quad : \hat{\varphi} + \hat{\omega} + A\hat{Z}B = 180^\circ \quad 20^\circ + 40^\circ + A\hat{Z}B = 180^\circ$$

$$A\hat{Z}B = 120^\circ. \quad \hat{x} = 180^\circ - 120^\circ = 60^\circ$$