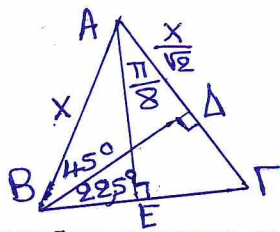


I. ΥΠΟΘΕΣΗ: Τρίγωνο, $AB=AG=x$, $\hat{A}=45^\circ$



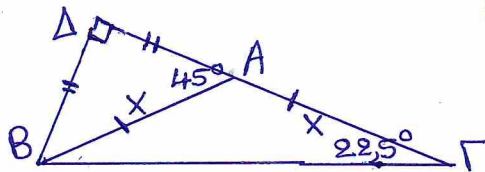
Αν $BD=υ_β$, $AE=υ_α$ έχουμε:

$$\Delta A = \Delta B = \frac{x\sqrt{2}}{2}, \Delta \Gamma = x - \frac{x\sqrt{2}}{2}, B\Gamma = x\sqrt{2}-\sqrt{2}$$

$$AE = \frac{x}{2}\sqrt{2+\sqrt{2}}, \text{ ε ν ο μ ε ν ω ς }$$

$$\varepsilon \varphi \frac{\pi}{8} = \frac{\Delta \Gamma}{\Delta B} = \sqrt{2}-1 = \frac{E\Gamma}{EA} = \frac{1}{\sigma \varphi \frac{\pi}{8}}, \sigma \omega \frac{\pi}{8} = \frac{\sqrt{2}+\sqrt{2}}{2}, \eta \mu \frac{\pi}{8} = \frac{\sqrt{2}-\sqrt{2}}{2}$$

II. ΔΙΝΟΝΤΑΙ: Τρίγωνο ABΓ ($AB=AG$), $\hat{A}=135^\circ$

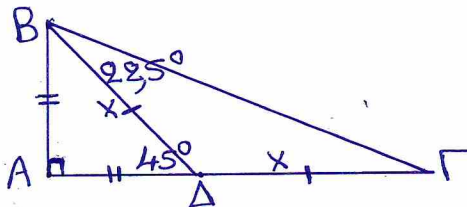


Αν $BD=υ_β$ είναι:

$$\Delta B = \Delta A = \frac{x}{\sqrt{2}} \text{ και }$$

$$\varepsilon \varphi \hat{\Gamma} = \frac{\Delta B \Gamma}{\Delta \Gamma} = \frac{\Delta B}{\Delta \Gamma} = \frac{\frac{x}{\sqrt{2}}}{x + \frac{x}{\sqrt{2}}} = \frac{1}{\sqrt{2}+1} = \sqrt{2}-1, \dots$$

III. ΔΙΝΟΝΤΑΙ: Τρίγωνο ABΓ ($\hat{A}=90^\circ$), $\hat{\Gamma}=22.5^\circ$

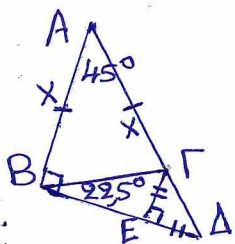


Αν Δ είναι σημείο του AG με

$$\Delta B = \Delta \Gamma = x, \text{ ισ } x \dot{\cup} \text{ ο υ ν: }$$

$$AB=AD=\frac{x}{\sqrt{2}}, B\Gamma=x\sqrt{2}+\sqrt{2}, \varepsilon \varphi \hat{\Gamma} = \dots$$

IV. ΔΙΝΟΝΤΑΙ: Τρίγωνο ABΓ ($AB=AG=x$), $\hat{A}=45^\circ$



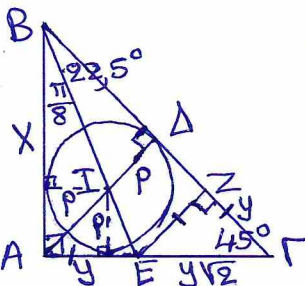
Αν $BD \perp BA$, $\Gamma E \perp B\Delta$ έχουμε:

$$B\Delta = BA = x, A\Delta = \frac{B\hat{A}\Delta}{\sqrt{2}} x\sqrt{2}, \Gamma\Delta = x\sqrt{2}-x,$$

$$\Gamma E = \Delta E = \frac{\Gamma\Delta}{\sqrt{2}}, \text{ ο ν ο τ ε }$$

$$\varepsilon \varphi \hat{\Gamma} B E = \frac{E\Gamma}{E B} = \frac{(x\sqrt{2}-x): \sqrt{2}}{x - (x\sqrt{2}-x): \sqrt{2}} = \sqrt{2}-1, \dots$$

V. ΥΠΟΘΕΣΗ: Τρίγωνο ABΓ ($AB=AG=x$), $\hat{A}=90^\circ$



Αν $AD=\delta_\alpha$, $BE=\delta_\theta$, $EZ \perp B\Gamma$, είναι:

$$\Delta A = \Delta B = \frac{x\sqrt{2}}{2}, \rho = \frac{\theta + \delta - \alpha}{2} = \frac{x(2-\sqrt{2})}{2},$$

$$\mu \varepsilon \ E A = E Z = y < x, y = \frac{x}{\sqrt{2}+1} = x(\sqrt{2}-1)$$

$$\text{και } \varepsilon \varphi \frac{\pi}{8} = \frac{\Delta I}{\Delta B} = \sqrt{2}-1 = \frac{Z E}{Z B} = \frac{y}{x\sqrt{2}-y} = \dots$$

VI.

