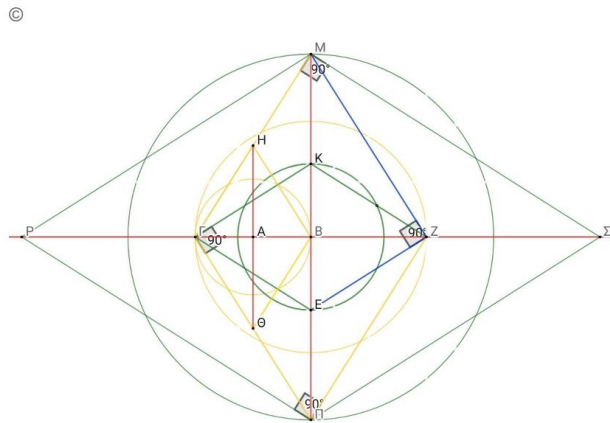


Details And Theory At The Page Theory Analysis

George Bouras

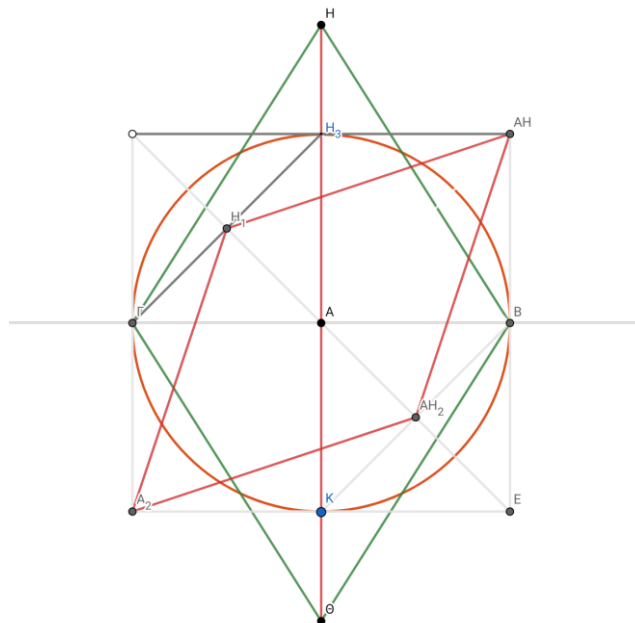
Date of Submission: 01-01-2024

Date of Acceptance: 11-01-2024



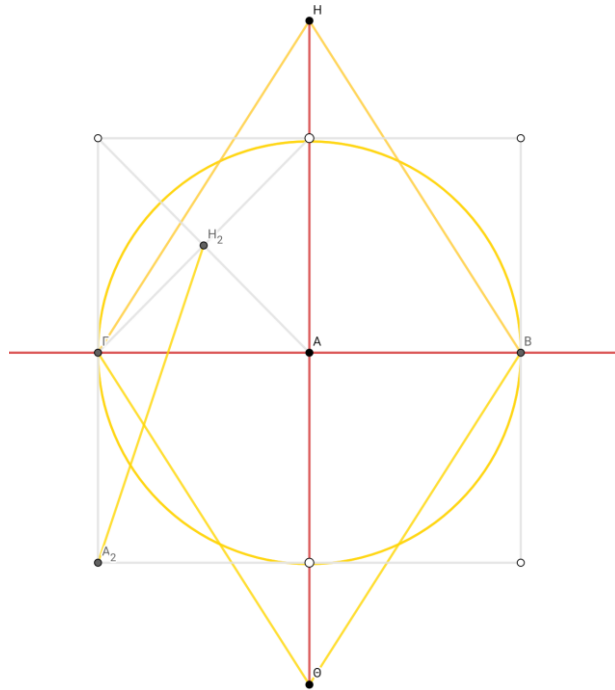
Develop of circle and rhombus of same center and area in squares (1), $(4 \div X)^2$, (4), (X^2) with $3 \times 90^\circ$ rotation. $X = \text{MII} = \text{perimeter of first circle}$. (squares are self-explanatory, of the same center, sides equal as each diameter of each circle.)

Attempt to square the circle with ruler and compass according to Euclidean geometry. what went wrong. where is the mistake.

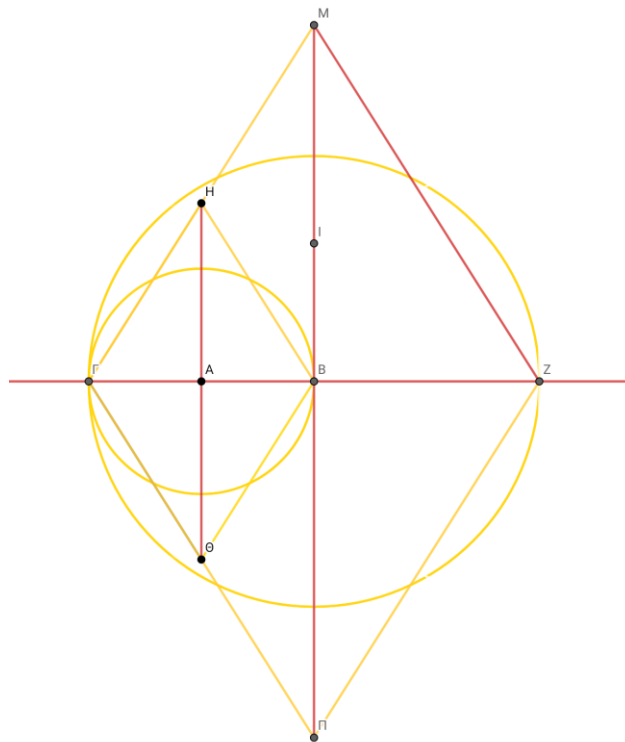


Perimeter and area of each circle with ruler and compass only

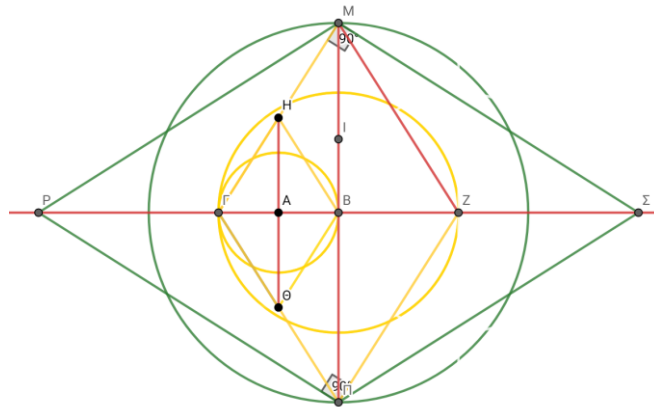
CONSTRUCTION STEPS



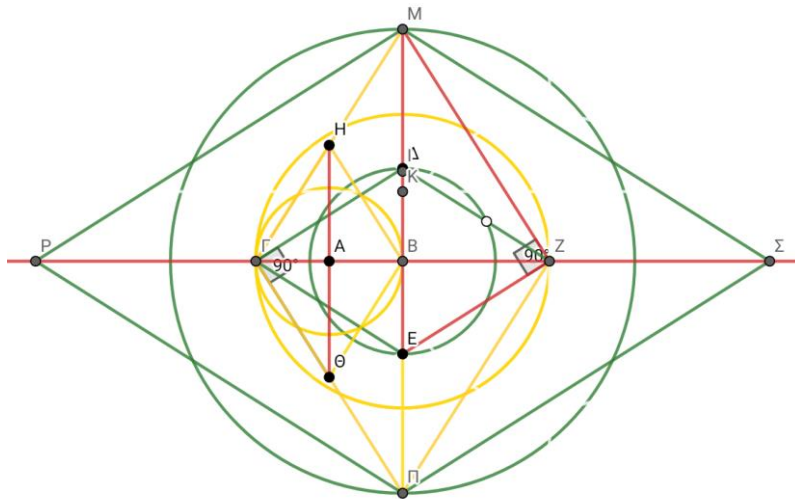
$HA^2 = (3/4)^2 + (1/4)^2$. $HA \times 4 = \mu\pi$. $(\Gamma B \times H\Theta) \div 2 = \text{area}1 = HA$. $= 1/4 \mu\pi$ I place it perpendicular to ΓB in the center A and correspondingly I place $A\Theta$... and I have Small diagonal $\Gamma B=1$ and large diagonal $H\Theta = \frac{1}{2}$ of the circumference of the circle. And I place the sides of the rhombus.



$\Gamma B \times \sqrt{4} = \Gamma Z$. I move the axis and double to ΓZ . I extend ΓH to the vertical axis at M and correspondingly all the sides and double $H\Theta$ to $M\Pi$. $H\Theta \times \sqrt{4} = M\Pi$. $\text{area}2 = M\Pi$



$M\Pi^2/2 = P\Sigma$. Area3 = $M\Pi \times M\Pi^2/4$ from $\Gamma M I$ bring a perpendicular from M to the horizontal axis to Σ and accordingly draw all its sides



$MZ^2 = MB^2 + BZ^2$. $MZ^2 \div M\Pi^2/4 = ZE^2$. $ZE^2 - BZ^2 = BE^2$ $M\Pi \div \sqrt{(M\Pi^2/4)} = \Gamma Z = 2$ και $2 \div \sqrt{(M\Pi^2/4)} = KE = 4/M\Pi$ $2\Gamma Z \div BE^2 = M\Pi^2$ (of perimeter 4 and an area equal to diameter $4 \div M\Pi$). I bring a perpendicular from MZ from Z to the vertical axis at point E and draw a diameter and respectively all the sides.