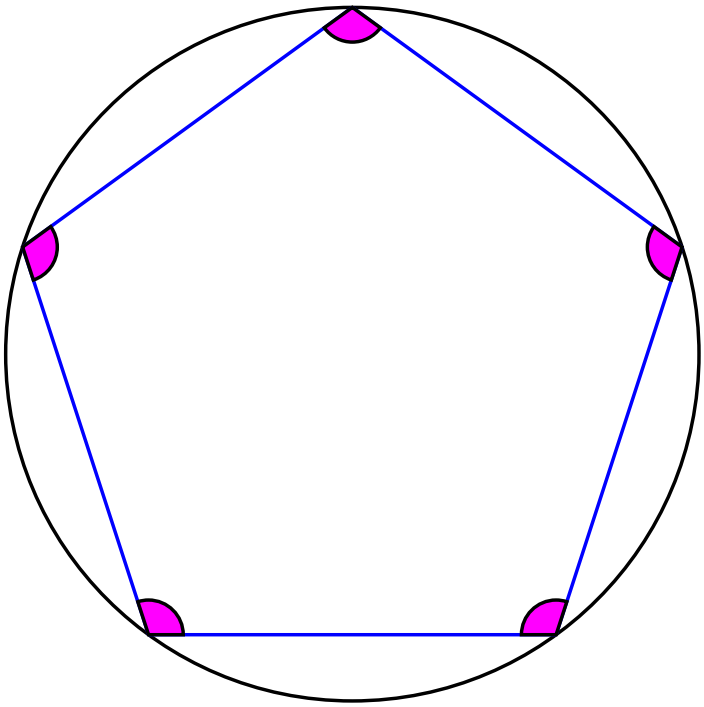

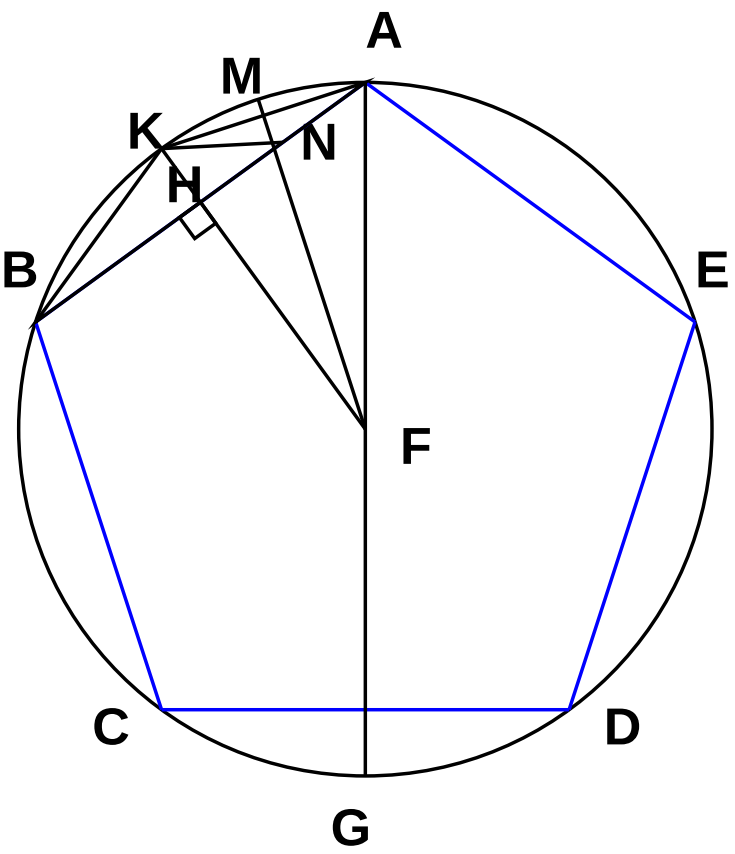
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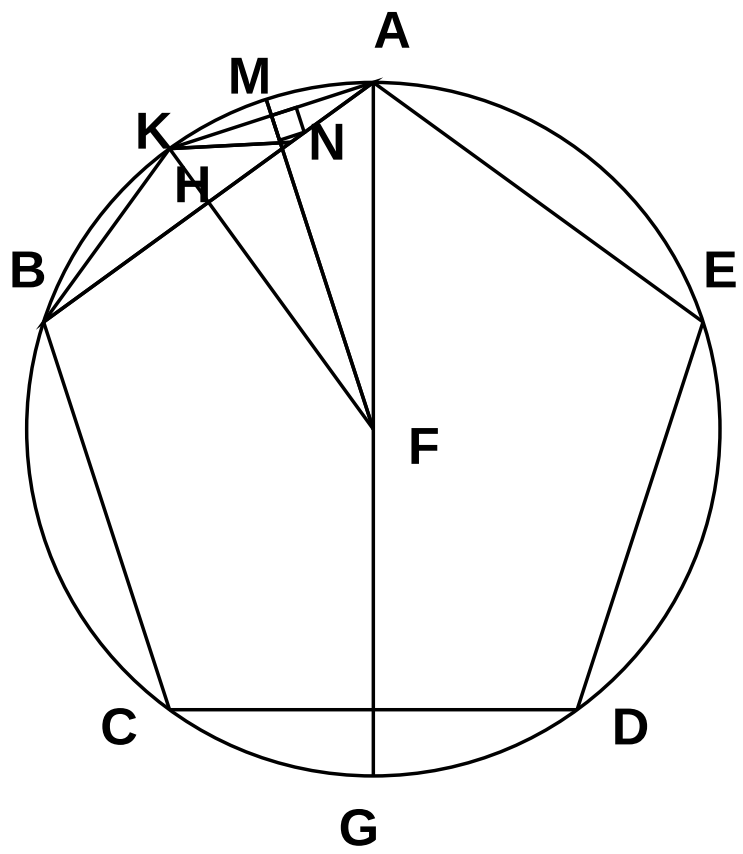
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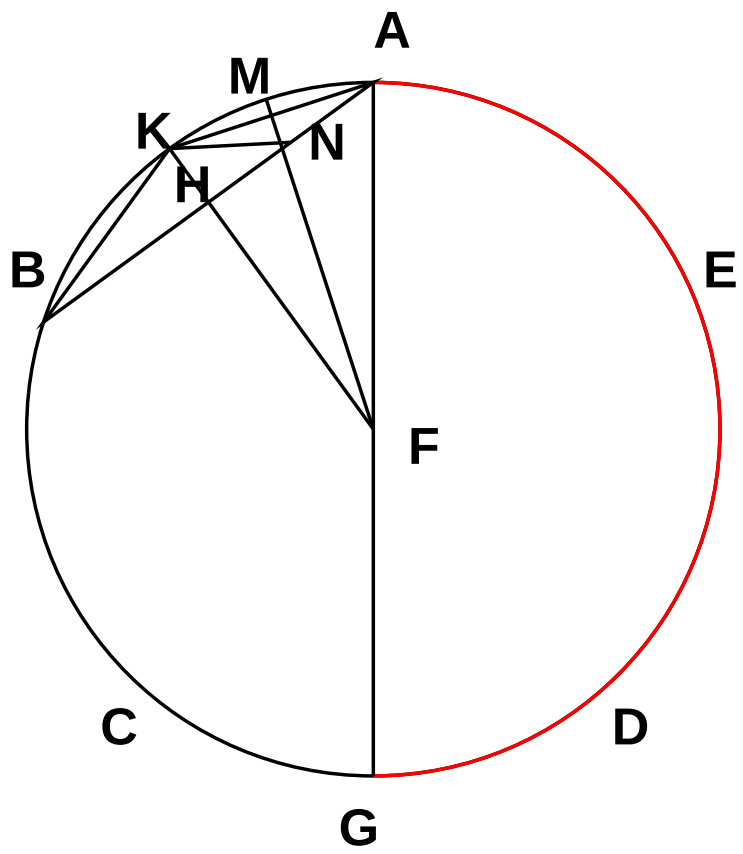
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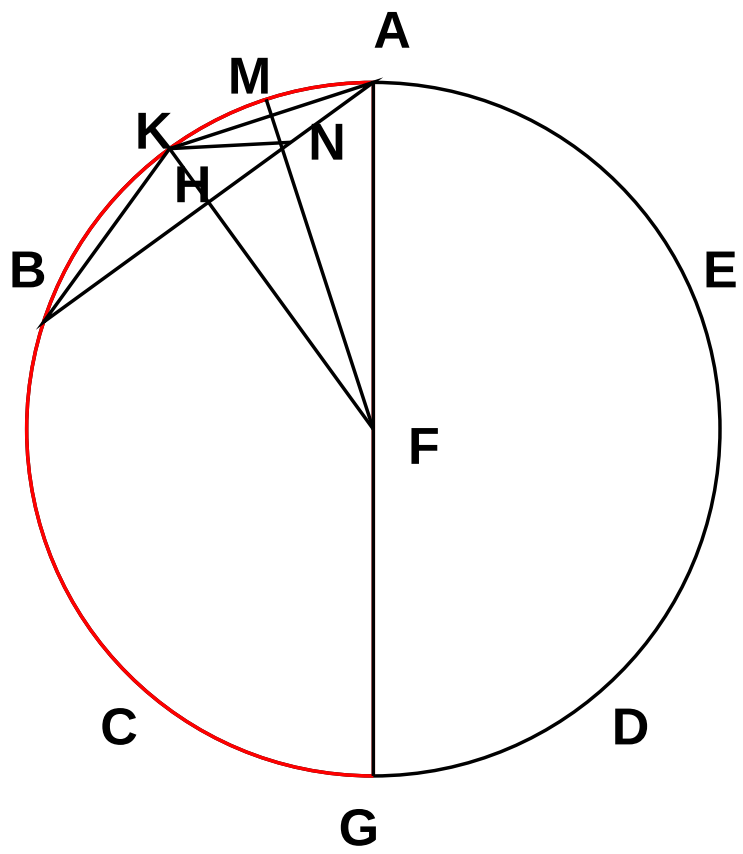
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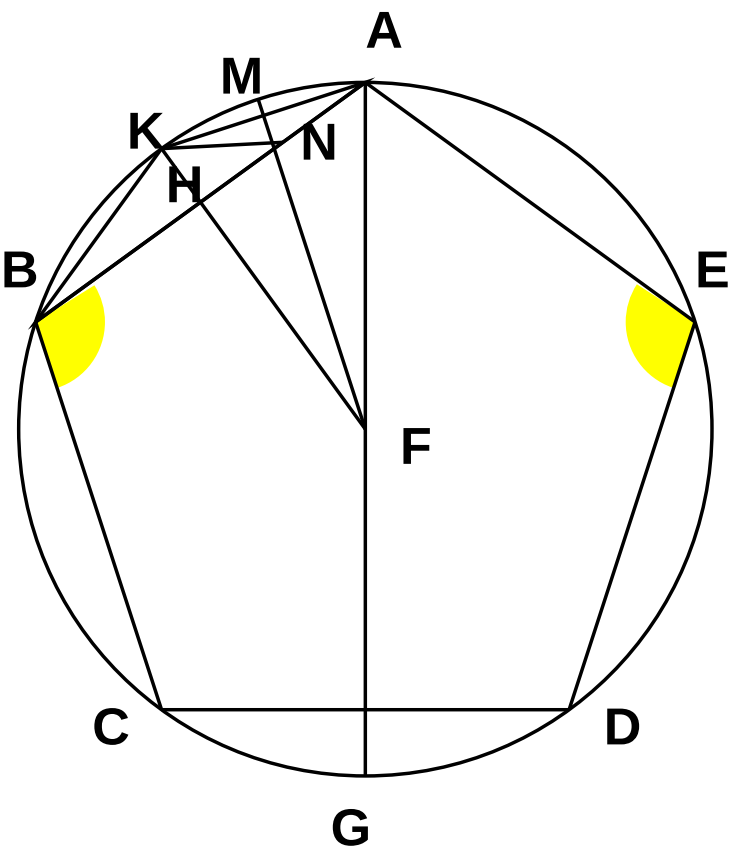
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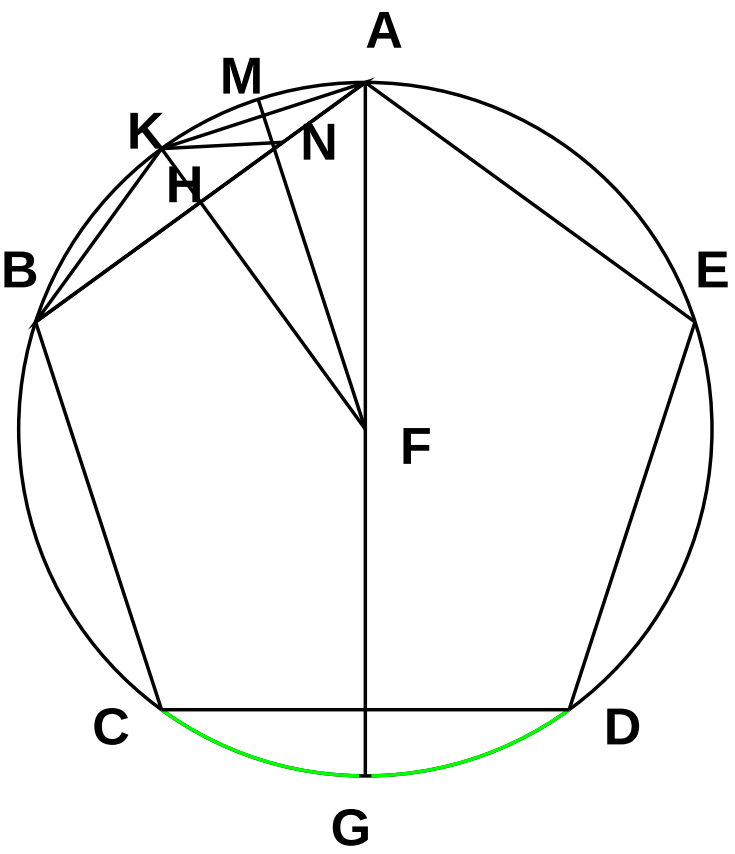
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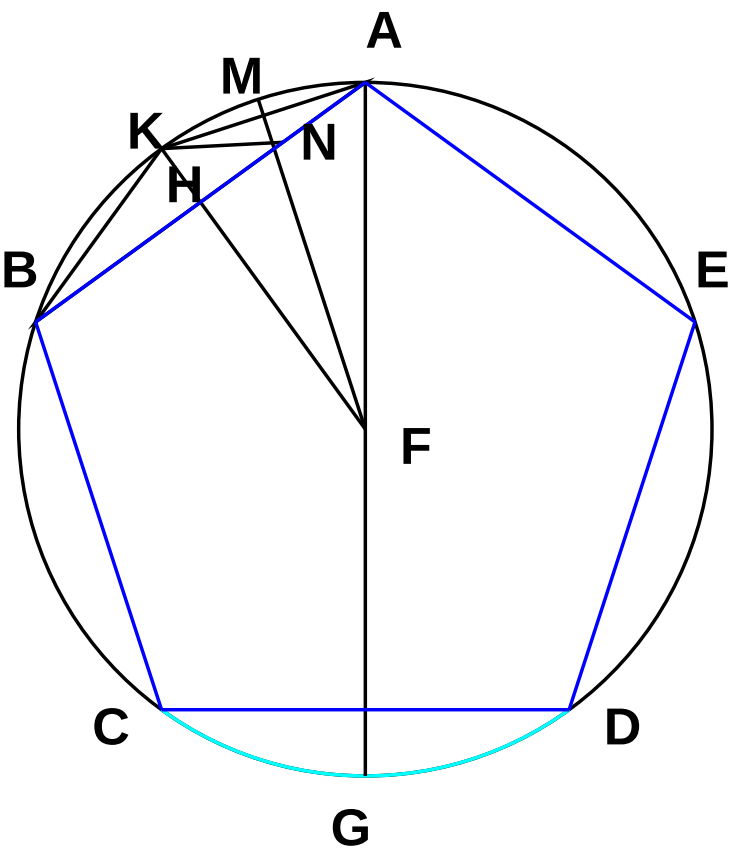
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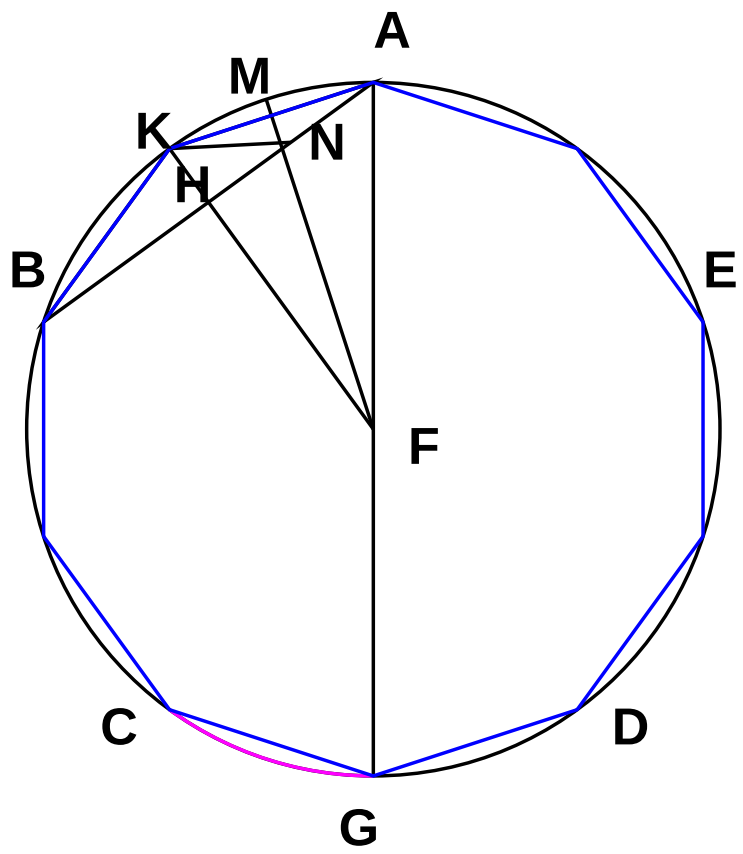
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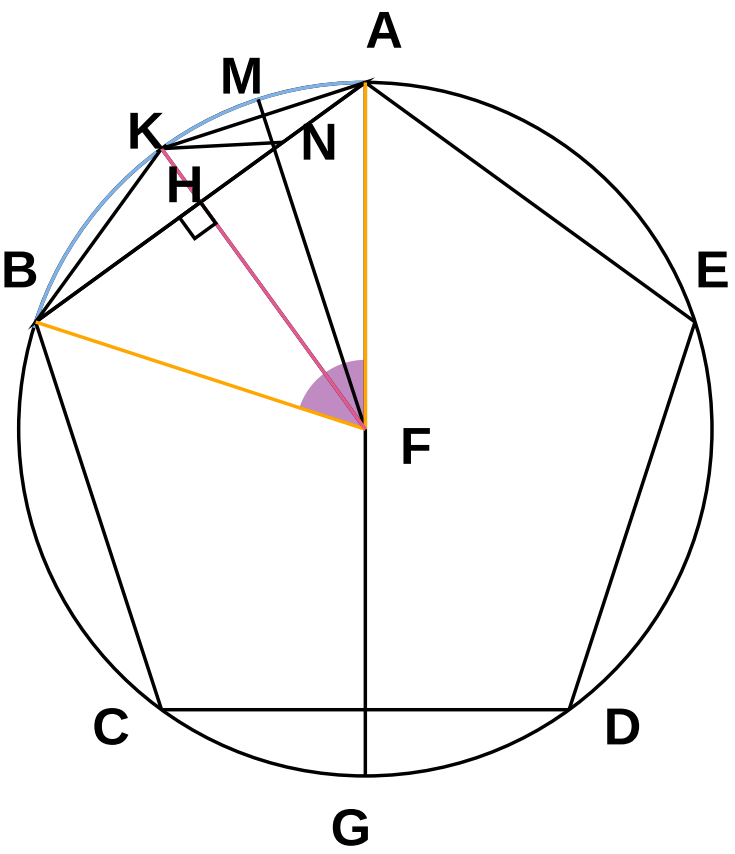
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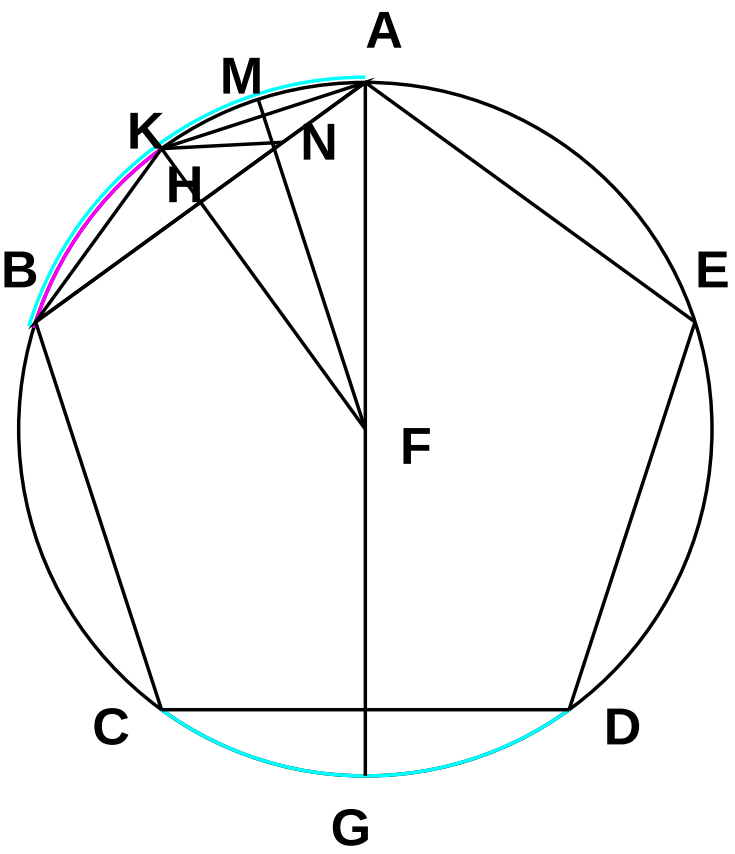
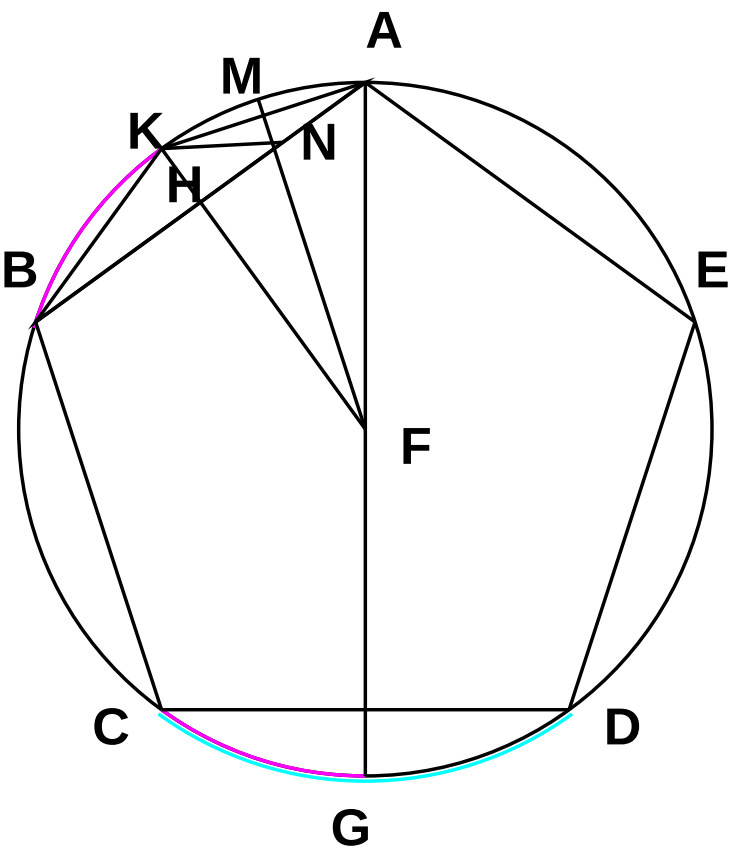


Since circumference AB is double circumference BK,

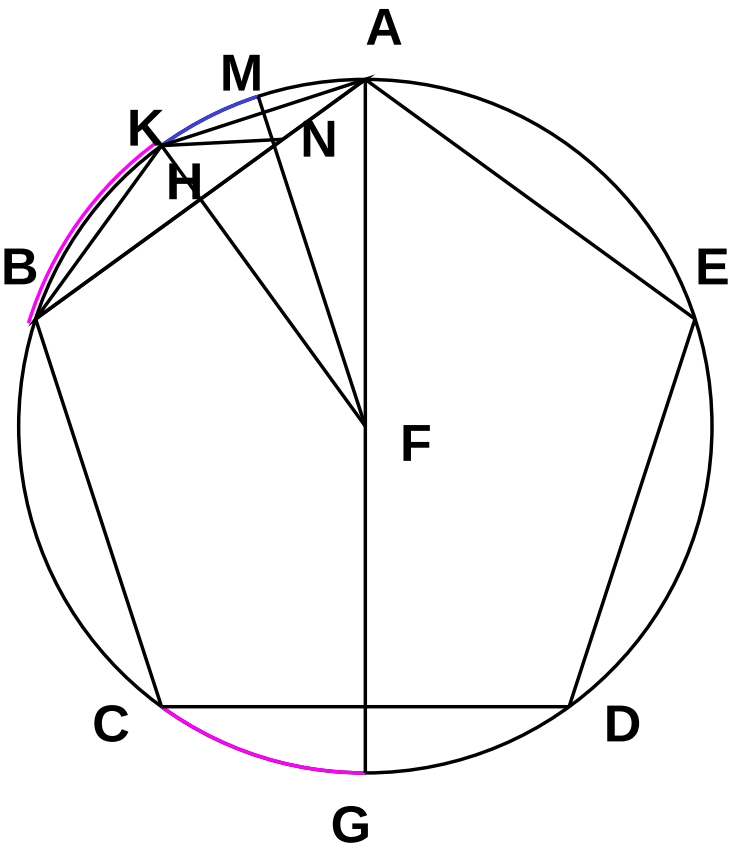
and circumference CD equals circumference AB,

therefore circumference CD is also double circumference BK



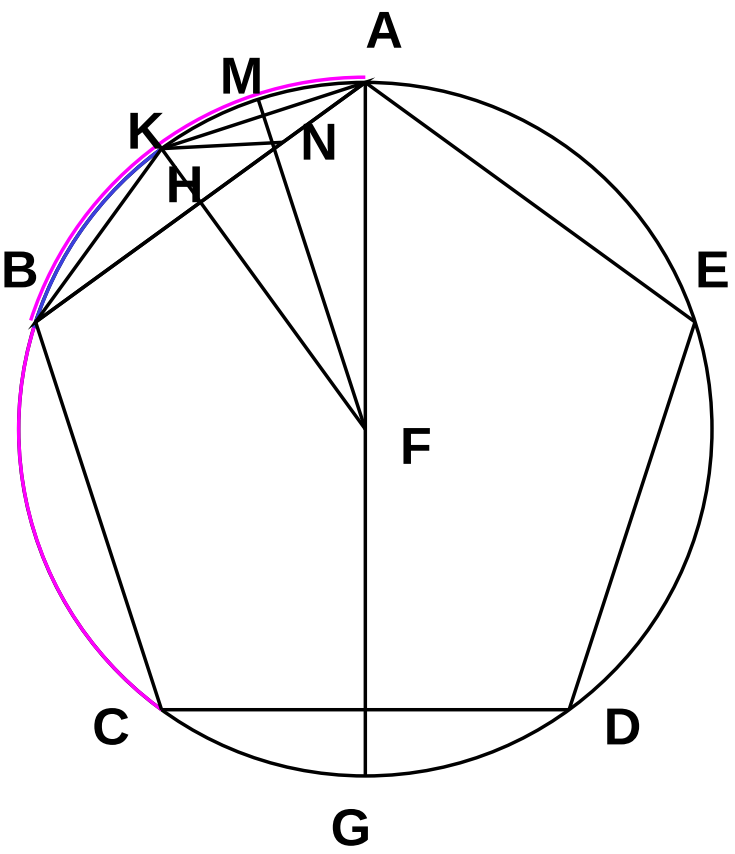
Circumference CD is also double CG, therefore

circumference CG equals circumference BK



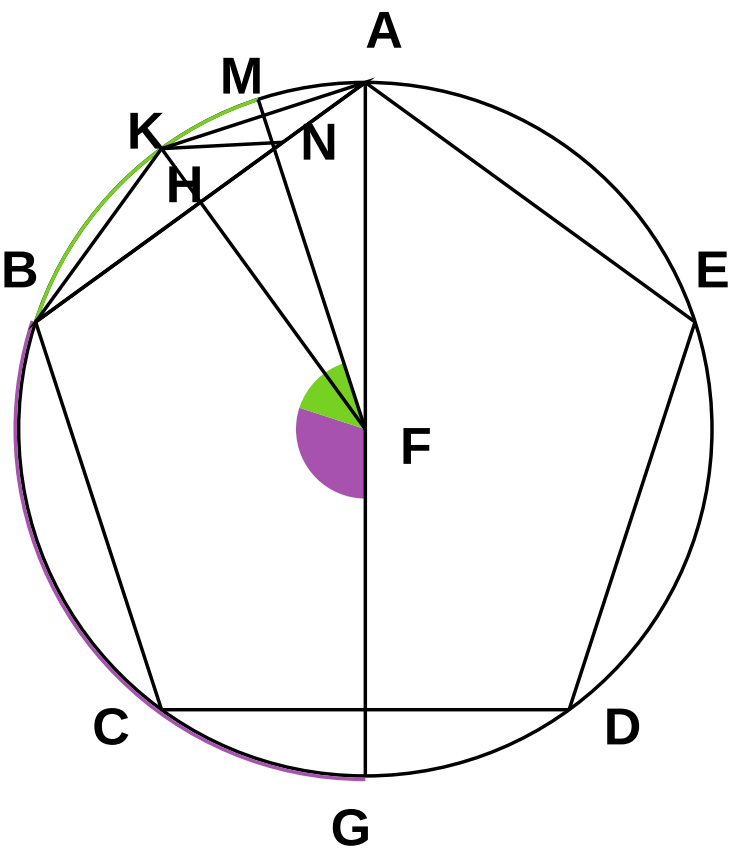
Circumference BK double circumference KM, therefore

circumference CG is also double circumference KM.



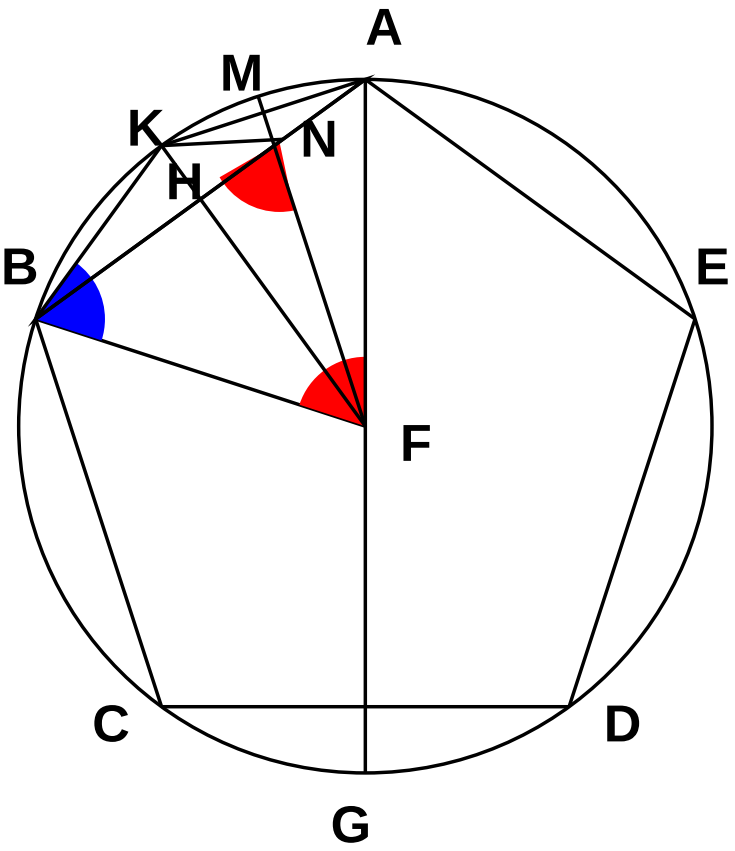
Circumference CB is also double circumference BK, and

circumference CB is also double circumference BA.



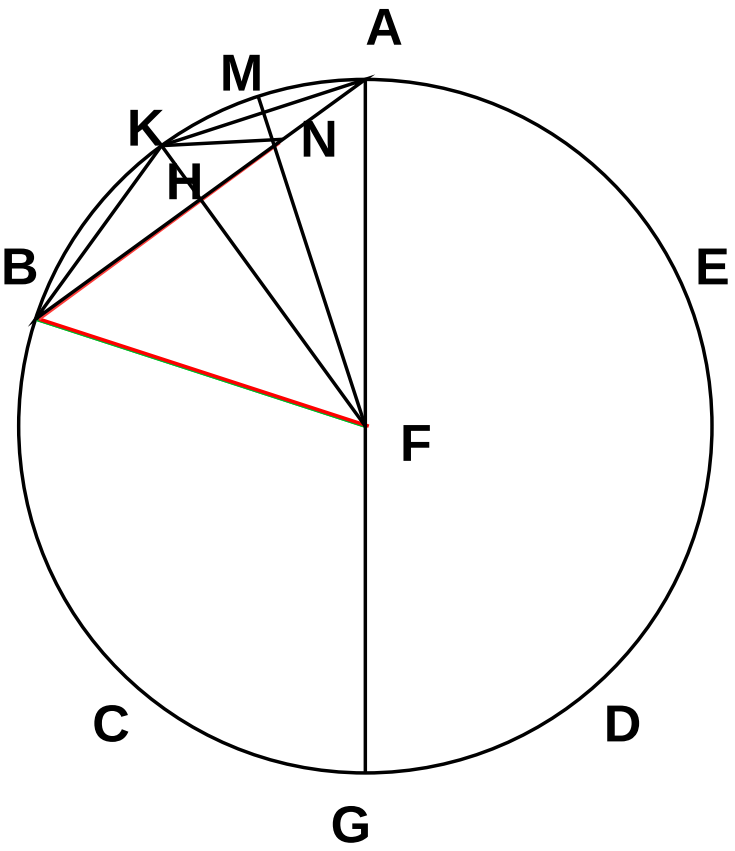
Circumference GB is also double circumference BM,

Therefore angle GFB equals angle BFM.



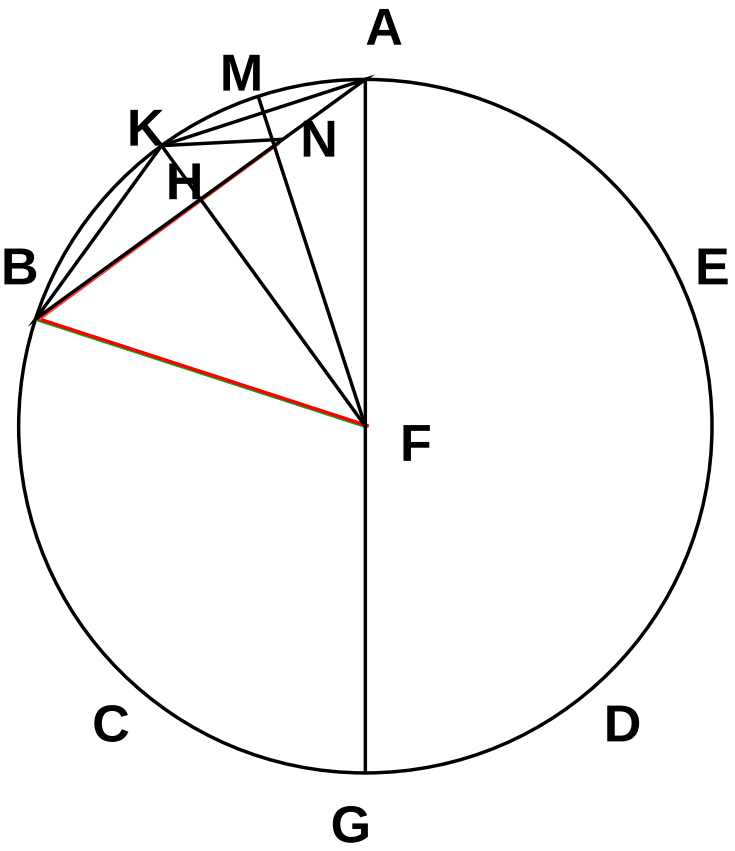
Since ABF is common to triangles ABR and BRN, then AFB

equals BNF and triangles ABF and BFN are equilangular.

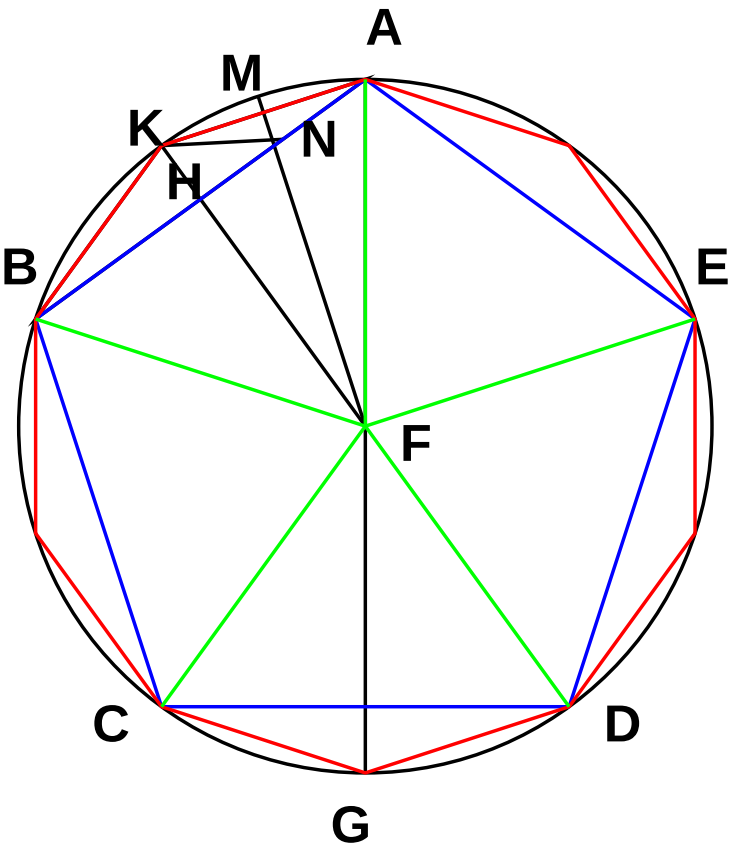


AB is to BF as FB is to BN.

Therefore rectangle AB by BN equals the square on BF.



Since AL equals LK, and LN is common, the KN equals AN. Angle LAN equals KBN, therefore LKN equals KBN. Angle A is common to triangles AKB and AKN, therefore AKB equals KNA. Triangle KBA is equilangular to triangle KNA, therefore BA is to AK as KA is to AN. Therefore rectangle BA by AN equals on AK. Since we showed that rectangle AB by BN also equals the square on BF, the sum of the rectangles AB by BN and BA by AN equals sum of squares of BF and AK



AB is the side of a pentagon, BF is the side of a hexagon,

AK is the side of a decagon.

Therefore an equilateral pentagon inscribed in a circle

Then the square of the side of the pentagon equals the sum

of the squares on the sides of the hexagon and the decagon

inscribed in the same circle.