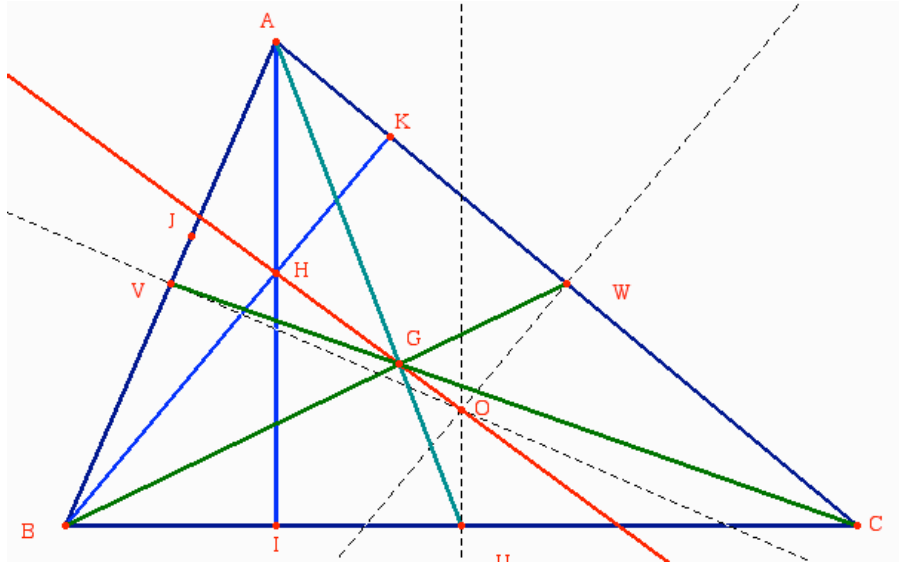


Euler's line proof by using vector calculations only.

Let ABC be a regular triangle, U the midpoint of BC, V the midpoint of AB, and W the midpoint of AC.



1. Let M be the point defined by the vectorial equation $\overline{MA} + \overline{MB} + \overline{MC} = \overline{0}$
Show WHY this point M is the intersection G of the three median lines AU, BV, CW.
2. Let N be the point defined by the vectorial equation $\overline{OA} + \overline{OB} + \overline{OC} = \overline{ON}$
Show WHY this point is the intersection H of the three heights AI, BK, CJ
3. From the above vectorial relations prove that O, G, H are on the same line (Euler's line).