Cyclic Hexagon - Alternate Angle Sums with *GeoGebra*

by Michael de Villiers, 25 June 2023

Here are some screen grabs of different alternate angle sum measurements of a cyclic hexagon using *GeoGebra Classic 6* - Fig 5 shows an example where the two sums of alternate angles are not equal.

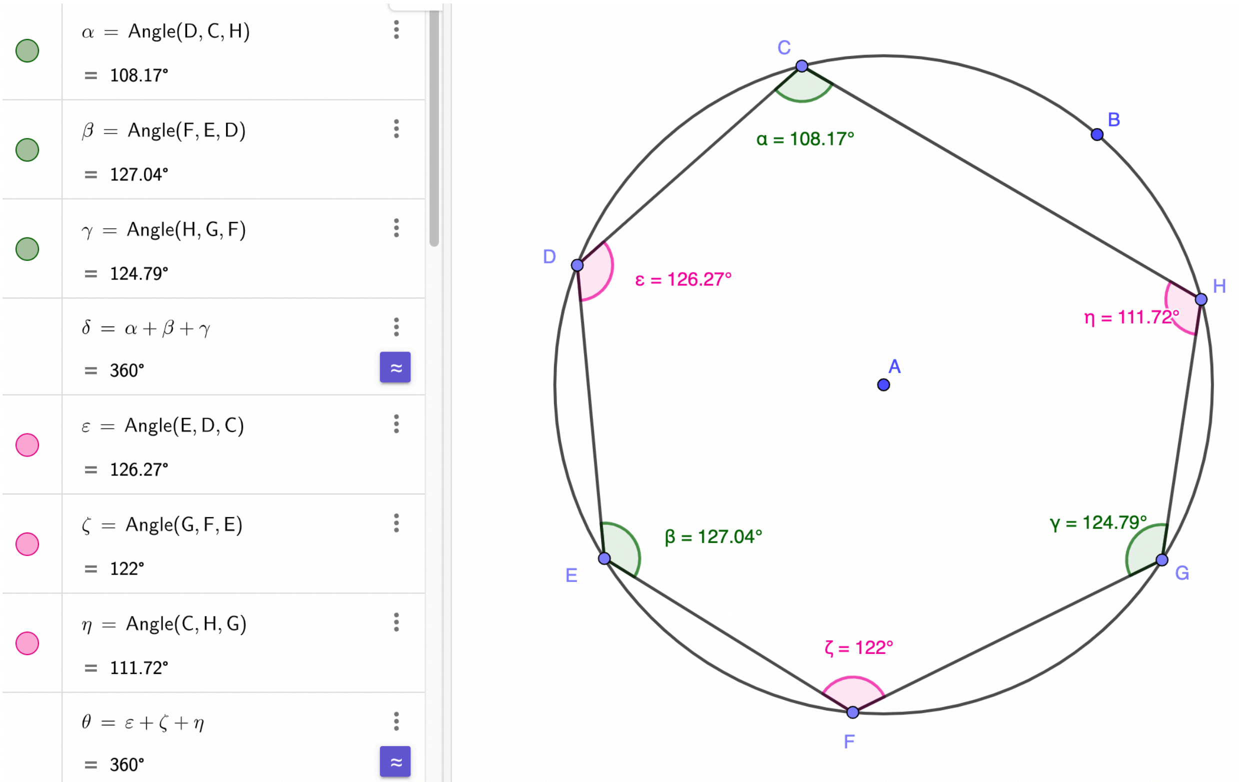

Fig 1 Convex case - sum of alternate angles = 360°

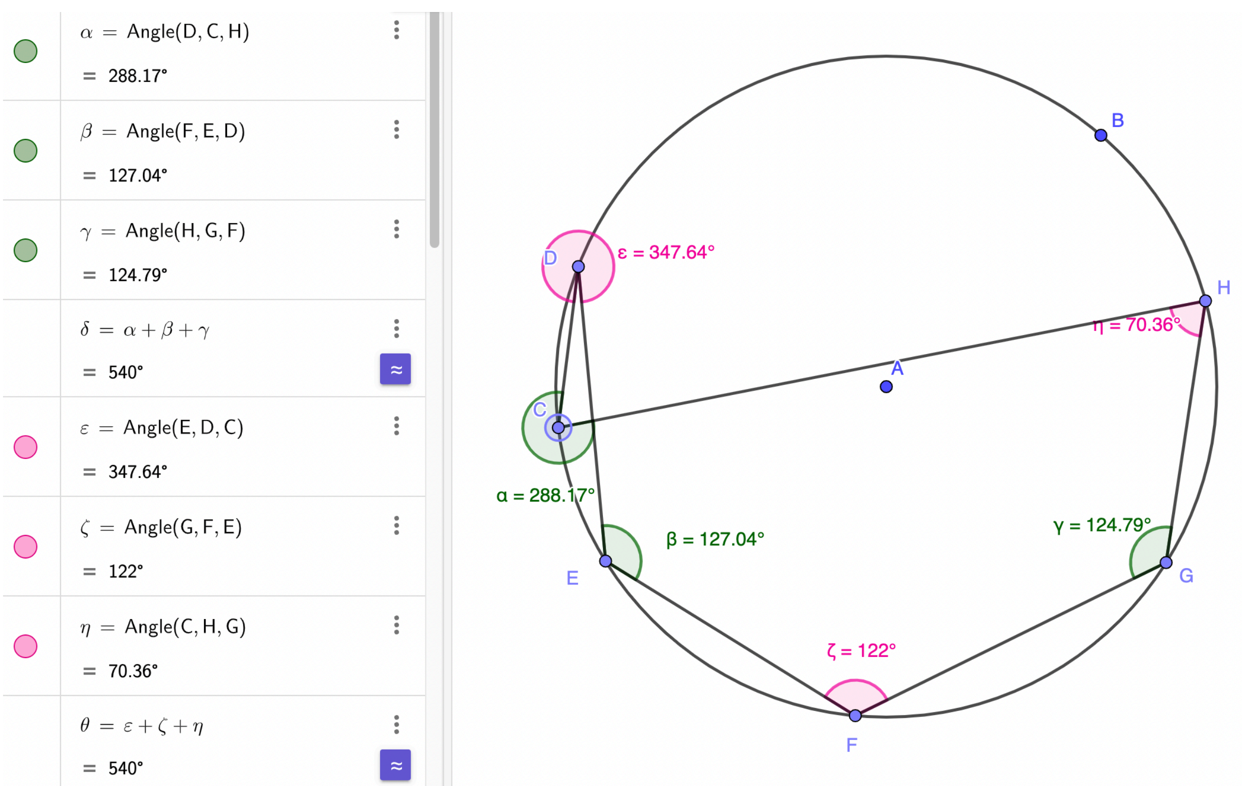

Fig 2 Crossed case 1 - sum of alternate angles = 540°

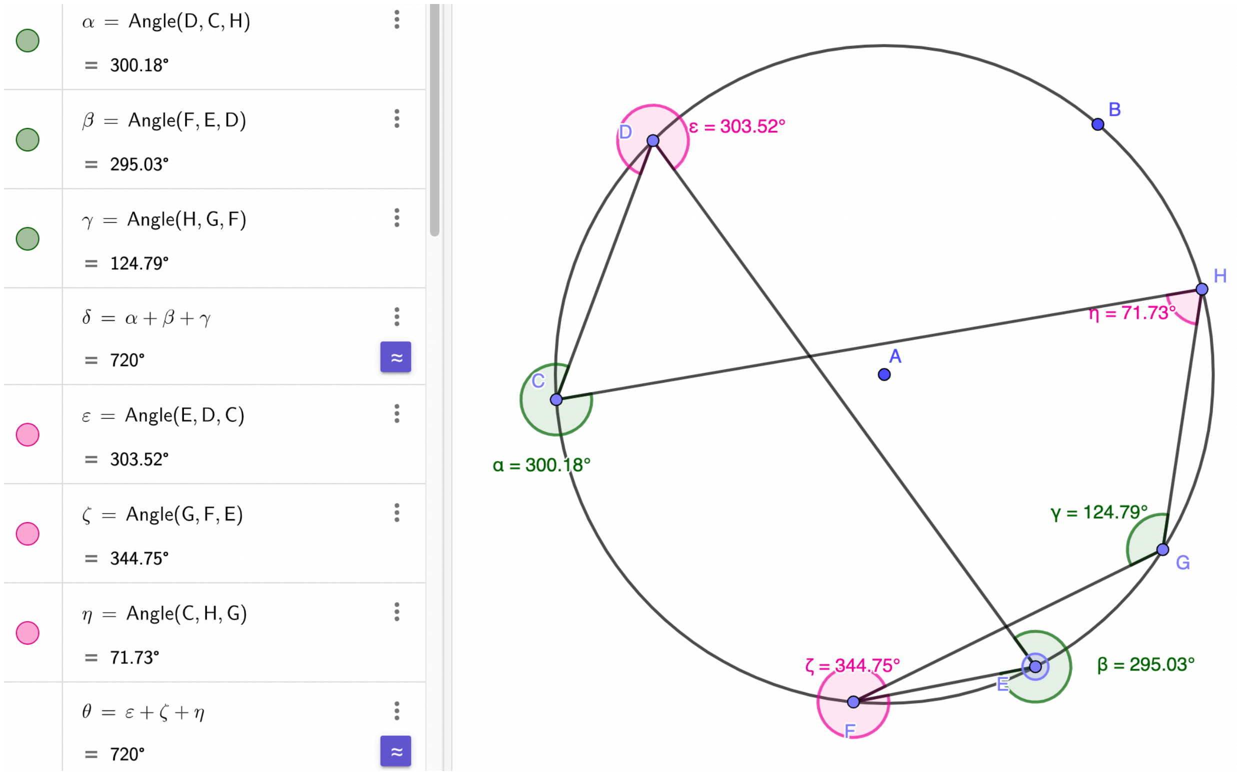

Fig 3 Crossed case 2 - sum of alternate angles = 720°

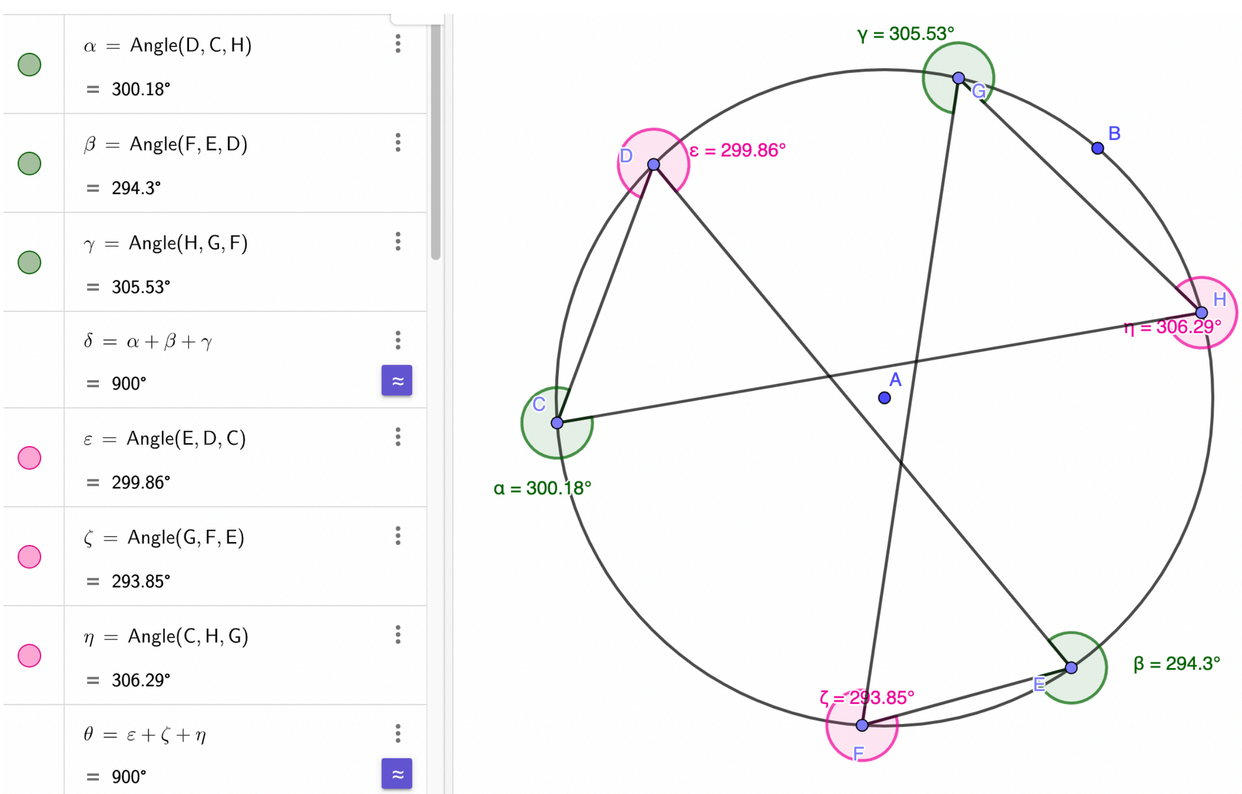

Fig 4 Crossed case 3 - sum of alternate angles = 900°

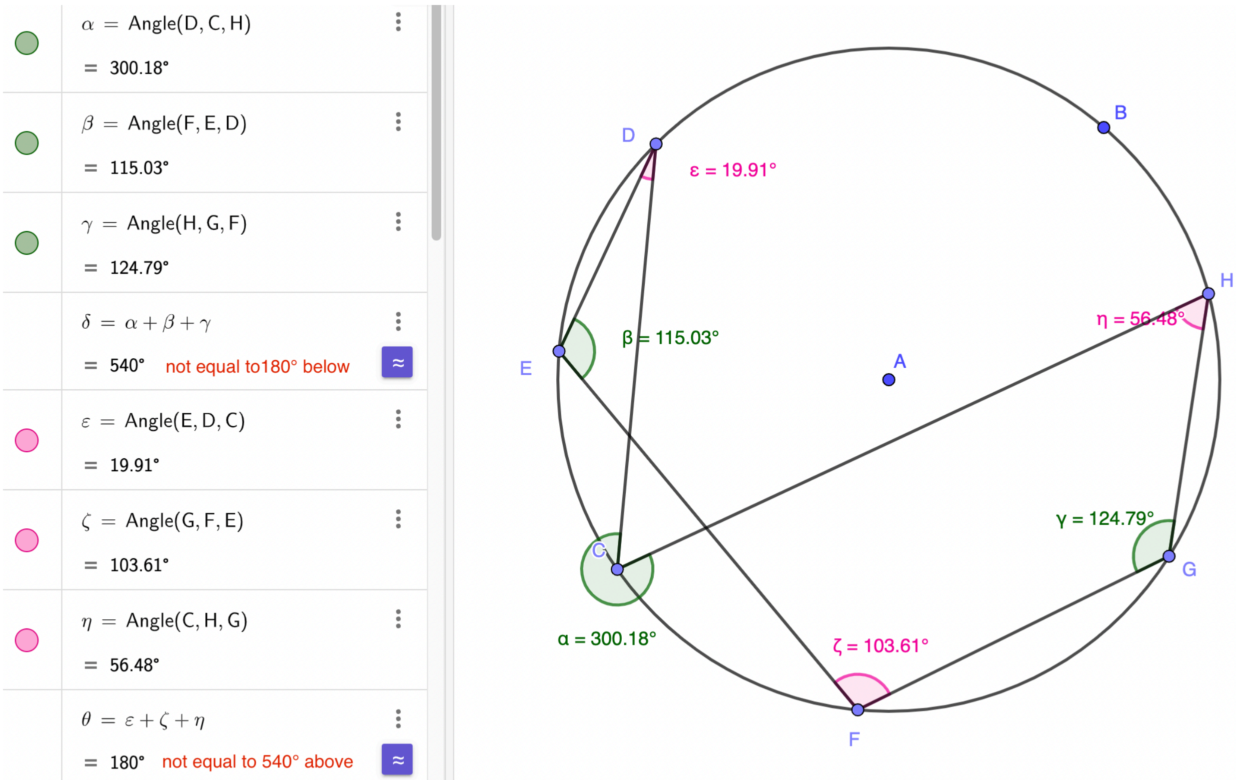

Fig 5 Crossed case 4 - sum of alternate angles **not equal: 540° ≠ 180°**