Reproducing with GeoGebra the computation of a sphere’s volume due to Archimedes. (Recreando con GeoGebra el cálculo del volumen de la esfera ideado por Arquímedes.)


Summary: We recreate with the dynamic geometry system (DGS) GeoGebra, that now incorporates powerful 3D capabilities, the famous construction-deduction of the calculation of the volume of a sphere due to Archimedes. This classic construction-deduction uses two 3D auxiliary figures: a cone and a cylinder, whose volumes are much easier to obtain. Using this approach, the end-user of the DGS can easily visualize how the problem is reduced to something as simple as Pythagoras theorem. We believe that this recreation, based on the use of a 3D DGS system, is both eye-catching and of educational interest.

Classification: U70 G40

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