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Affine regular icosahedron circumscribed around the affine regular octahedron in GS–quasigroup

Abstract: The concept of the affine regular icosahedron and affine regular octahedron in a general GS-quasigroup will be introduced in this paper. The theorem of the unique determination of the affine regular icosahedron by means of its four vertices which satisfy certain conditions will be proved. The connection between affine regular icosahedron and affine regular octahedron in a general GS-quasigroup will be researched. The geometrical representation of the introduced concepts and relations between them will be given in the GS-quasigroup $\mathbb{C}(\frac{1}{2}(1 + \sqrt{5}))$.

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