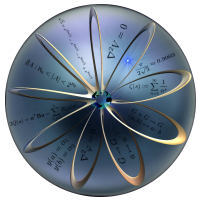

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pentagon

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A *pentagon* is a 5-sided planar polygon.

Regular pentagons are of particular interest for geometers. On a regular pentagon, the inner angles are equal to 108°. All ten diagonals have the same length. If s is the length of a side and d is the length of a diagonal, then

$$\frac{d}{s} = \frac{1+\sqrt{5}}{2};$$

that is, the ratio between a diagonal and a side is the Golden Number.

A regular pentagon (along with its diagonals) can also be obtained as the projection of a regular pentahedron in four dimensional space onto a plane determined by two opposite edges. This is analogous to the way a square with its diagonals can be obtained as the projection of a tetrahedrononto a plane determined by two opposite edges.