SYMMETRY GROUPS OF PETRIE POLYGONS

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MSC 2000: 30F10, 05C10, 05C25

Abstract

A regular map $\mathcal{M}$ on a Riemann surface X is an embedding of a finite connected graph $\mathcal{G}$ into X such that the components of $X - \mathcal{G}$ are identical regular, which are called the faces of $\mathcal{M}$. A Petrie polygon of $\mathcal{M}$ is a polygon such that every two consecutive sides, but no three, belong to a face of $\mathcal{M}$. In this study we determine the symmetry group of a Petrie polygon of a regular map.

Keywords: Regular map, Petrie polygon, Symmetry group.

References

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