SYMMETRIC COLORINGS OF REGULAR POLYGONS

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It is calculated the number of symmetric r-colorings of vertices of a regular n-gon and the number of equivalence classes of symmetric r-colorings [1, 2]. A coloring is symmetric if it is invariant in respect to some mirror symmetry with an axis crossing center of polygon and one of its vertices. Colorings are equivalent if we can get one from another by rotating about the polygon center.

References

- 1. Yuliya Gryshko(Zelenyuk), Symmetric subsets and colorings of groups, Ph.D. dissertation, Kyiv Taras Shevchenko University (2002), 118 p.
- 2. Yuliya Gryshko(Zelenyuk), Symmetric colorings of regular polygons, submitted.

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