Zeitschrift: L'Enseignement Mathématique

Herausgeber: Commission Internationale de l'Enseignement Mathématique

Band: 38 (1992)

Heft: 1-2: L'ENSEIGNEMENT MATHÉMATIQUE

Artikel: PERMUTATION GROUPS GENERATED BY A TRANSPOSITION AND ANOTHER ELEMENT

Autor: Janusz, Gerald J.

Bibliographie

DOI: https://doi.org/10.5169/seals-59481

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Siehe Rechtliche Hinweise.

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. Voir Informations légales.

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. See Legal notice.

Download PDF: 19.05.2025

ETH-Bibliothek Zürich, E-Periodica, https://www.e-periodica.ch

We may collect the results as follows.

SUMMARY. Let $G = \langle \sigma, \tau \rangle$ with $\sigma, \tau \in \mathrm{Sym}(n)$ and τ a transposition.

1. If σ is an n-cycle, the G is described in Theorem 3.
2. If σ is a product of disjoint cycles, one of which moves both the symbols moved by τ, then G is described in Theorem 5.
3. If σ fixes both symbols moved by τ then $G = \langle \sigma \rangle \times \langle \tau \rangle$ is an abelian group.
4. If σ moves one, but not both of, the symbols moved by τ or if σ moves both symbols moved by τ but not in the same cycle then σ may be replaced by $\sigma_1 = \tau\sigma$ and then $G = \langle \sigma_1, \tau \rangle$ and G is described as in case 1 or 2.

REFERENCES

[1] JACOBSON, N. *Basic Algebra.* W. H. Freeman and Co., San Francisco, 1974.
[2] JANUSZ, G. and J. ROTMAN. Outer Automorphisms of S_6. *Amer Math. Monthly 89, No. 6* (1982), 407-410.
[3] JORDAN, C. *Traité des substitutions et des Equations Algébriques.* 1870 (Note C).
[4] ROTMAN, J. *Theory of Groups, 3rd Ed.* Allyn & Bacon, Inc. Boston, 1984.

(Reçu le 7 mai 1991)

Gerald J. Janusz

University of Illinois, Urbana, IL
Mathematical Reviews, Ann Arbor, MI

vide-leer-empty